

NASA's UNIVERSITY PROGRAM

ACTIVE PROJECTS

FISCAL YEAR 1994

**National Aeronautics and Space Administration
Office of Human Resources and Education
Education Division
Technology and Evaluation Branch/FET
Washington, DC 20546-0001**

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FOREWORD

As basic policy, NASA believes that colleges and universities should be encouraged to participate in the nation's space and aeronautics program to the maximum extent practicable. Indeed, universities are considered as partners with government and industry in the nation's aerospace program. NASA's objective is to have them bring their scientific, engineering, and social research competence to bear on aerospace problems and on the broader social, economic, and international implications of NASA's technical and scientific programs. It is expected that, in so doing, universities will strengthen both their research and their educational capabilities to contribute more effectively to the national well-being.

NASA field centers and certain Headquarters program offices provide funds for those activities in universities which contribute to the mission needs of that particular NASA element. Although NASA has no predetermined amount of money to devote to university activities, the effort funded each year is substantial. (See the bar chart on the next page). This annual report is one means of documenting the NASA-university relationship, frequently denoted, collectively, as NASA's University Program.

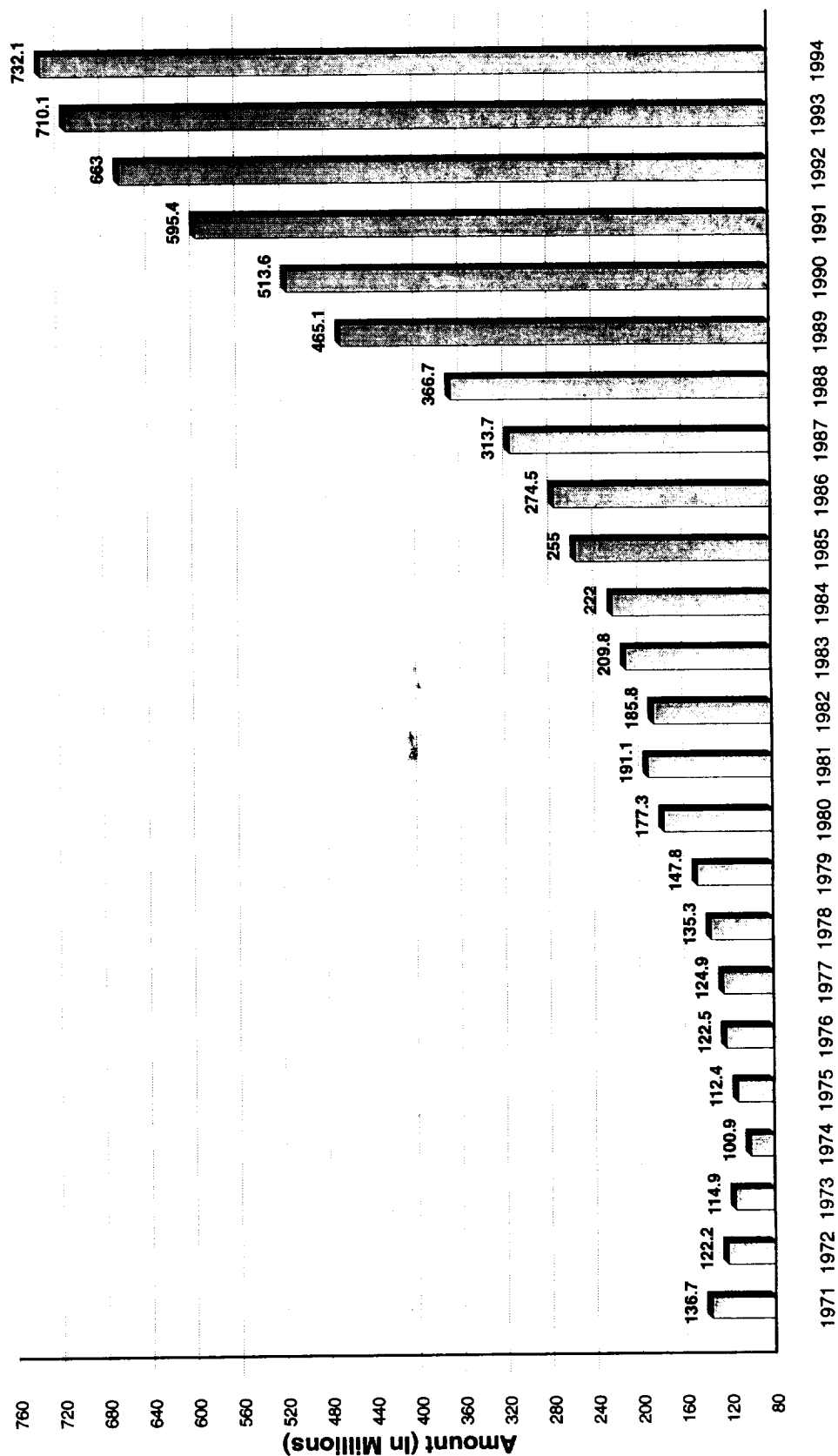
This report is consistent with agency accounting records, as the data is obtained from NASA's Financial and Contractual Status (FACS) System, operated by the Financial Management Division and the Procurement Office. However, in accordance with interagency agreements, the orientation differs from that required for financial or procurement purposes. Any apparent discrepancies between this report and other NASA procurement or financial reports stem from the selection criteria for the data.*

This report was prepared by the Technology and Evaluation Branch/FET, Education Division, Office of Human Resources and Education, using a management information system which was modernized during FY 1993.

* Agreements which meet active criteria definition and have deobligations may result in agreements having negative obligations in the body of this publication.

NASA Obligations to Universities

Fiscal Years 1971-1994



Fiscal Years

NOTE: Excludes awards to California Institute of Technology for operation of the Jet Propulsion Laboratory.

FY 1971 includes \$15.0M in awards to Draper Lab.

FY 1973 includes \$5.2M in awards to Draper Lab.
FY 1974 Draper Lab status changed from "university" to "nonprofit."

**FIFTY EDUCATIONAL INSTITUTIONS
LISTED ACCORDING TO TOTAL OBLIGATIONS
FISCAL YEAR 1994**

INSTITUTION		OBLIGATIONS (THOUSANDS)	PERCENT
		\$732,119	100.00
1	Stanford University	56,339	7.69
2	University of Arizona	48,226	6.58
3	Massachusetts Institute of Technology	39,242	5.36
4	California Institute of Technology	28,566	3.90
5	University of California at Berkeley	24,806	3.38
6	University of Maryland at College Park	19,447	2.65
7	Wheeling Jesuit College	19,385	2.64
8	New Mexico State University at Las Cruces	18,075	2.46
9	University of Colorado at Boulder	17,183	2.34
10	University of California at San Diego	13,705	1.87
11	University of Alaska at Fairbanks	13,094	1.78
12	University of Wisconsin at Madison	12,754	1.74
13	University of Alabama at Huntsville	12,550	1.71
14	Pennsylvania State University at University Park	12,426	1.69
15	Johns Hopkins University	11,529	1.57
16	University of Michigan at Ann Arbor	10,681	1.45
17	University of Utah	10,228	1.39
18	University of Texas at Austin	9,470	1.29
19	University of Washington	9,075	1.23
20	University of New Hampshire at Durham	8,591	1.17
21	University of Hawaii at Manoa	8,578	1.17
22	University of California at Los Angeles	8,496	1.16
23	Oklahoma State University	7,886	1.07
24	Harvard University	6,479	0.88
25	University of Houston	6,189	0.84
26	Columbia University	6,078	0.83
27	Case Western Reserve	5,773	0.78
28	Cornell University	5,701	0.77
29	San Jose University	5,542	0.75
30	Old Dominion University	5,295	0.72
31	Georgia Institute of Technology	5,202	0.71
32	University of Alabama at Birmingham	4,884	0.66
33	Ohio State University	4,762	0.65
34	Carnegie-Mellon University	4,677	0.63
35	University of Chicago	4,621	0.63
36	Texas A&M University	4,587	0.62
37	University of Iowa	4,568	0.62
38	Princeton University	4,559	0.62
39	Virginia Polytechnic Institute	4,465	0.60
40	University of Florida	4,397	0.60
41	University of Virginia	4,244	0.57
42	University of Southern California	4,011	0.54
43	Florida A&M University	3,924	0.53
44	Hampton University	3,782	0.51
45	University of California at Santa Barbara	3,777	0.51
46	University of Miami	3,645	0.49
47	University of Illinois at Urbana	3,543	0.48
48	North Carolina A&T State University	3,394	0.46
49	Utah State University	3,385	0.46
50	Washington University	3,381	0.46
	Other Colleges and Universities **	186,914	25.79

* Excludes awards to California Institute of Technology for operation of the Jet Propulsion Laboratory.

** Includes both foreign and domestic universities and colleges.

STATE AND U.S. TERRITORIES BY OBLIGATIONS

FISCAL YEAR 1994 (October 1 through September 30, 1994)

STATE		OBLIGATIONS (WHOLE DOLLARS)	PERCENT
		\$729,388,940	100.00
1	California	158,986,038	21.79
2	Massachusetts	51,468,640	7.05
3	Arizona	50,848,426	6.97
4	Texas	35,695,175	4.89
5	Maryland	33,246,660	4.55
6	Alabama	24,986,959	3.42
7	New York	23,884,565	3.27
8	Ohio	23,346,774	3.20
9	New Mexico	23,135,950	3.17
10	Virginia	22,122,403	3.03
11	Colorado	22,013,744	3.01
12	West Virginia	21,759,824	2.98
13	Pennsylvania	21,537,594	2.95
14	Florida	20,631,788	2.82
15	Wisconsin	14,323,814	1.96
16	Utah	13,883,743	1.90
17	Alaska	13,413,010	1.83
18	Michigan	13,094,786	1.79
19	Georgia	12,082,525	1.65
20	Illinois	10,870,833	1.49
21	New Hampshire	9,750,739	1.33
22	Washington	9,740,681	1.33
23	Oklahoma	8,591,470	1.17
24	Hawaii	8,577,877	1.17
25	North Carolina	8,283,815	1.13
26	District of Columbia	7,616,346	1.04
27	Tennessee	6,574,116	0.90
28	New Jersey	6,468,404	0.88
29	Iowa	6,113,464	0.83
30	Indiana	5,341,475	0.73
31	Missouri	4,736,525	0.64
32	Oregon	3,792,770	0.51
33	Louisiana	3,694,812	0.50
34	Rhode Island	3,407,954	0.46
35	Kansas	2,818,188	0.38
36	South Dakota	2,564,760	0.35
37	Minnesota	2,548,708	0.34
38	Puerto Rico	2,541,495	0.34
39	Mississippi	2,173,634	0.29
40	Nebraska	1,770,952	0.24
41	Connecticut	1,649,810	0.22
42	Kentucky	1,580,275	0.21
43	South Carolina	1,366,838	0.18
44	Montana	1,357,629	0.18
45	Wyoming	1,130,145	0.15
46	Arkansas	974,927	0.13
47	Delaware	964,470	0.13
48	Nevada	595,415	0.08
49	North Dakota	437,037	0.05
50	Idaho	388,702	0.05
51	Vermont	313,356	0.04
52	Maine	178,899	0.02

* Starting in FY1993, Active Actions with deobligations will be reported in this chart.

RESEARCH AND DEVELOPMENT PERCENT CHANGE REPORT 1990-1994 *

FIELDS OF SCIENCE	FY 1994 (\$1000)	% CHANGE FY 93-94	FY 1993 (\$1000)	% CHANGE FY 92-93	FY 1992 (\$1000)	% CHANGE FY 91-92	FY 1991 (\$1000)	% CHANGE FY 90-91	FY 1990 (\$1000)
ALL FIELDS TOTAL									
Physical Sciences, Total	641,462	6.19%	604,042	3.03%	586,299	9.85%	533,750	13.38%	470,746
Astronomy	244,391	0.43%	243,353	5.76%	230,052	20.48%	190,945	12.27%	170,084
Chemistry	110,996	5.58%	105,123	-6.87%	112,878	34.01%	84,230	20.40%	69,956
Physics	5,427	-15.52%	6,424	22.64%	5,238	-7.91%	5,688	-4.84%	5,977
Physical Sciences, NEC **	102,551	-4.72%	107,634	16.37%	92,490	11.94%	82,624	2.32%	80,751
Mathematical & Computer Sciences, Total	25,417	5.15%	24,172	24.30%	19,446	5.67%	18,403	37.34%	13,400
Mathematics	22,469	-14.93%	26,412	23.26%	21,428	-16.20%	25,569	-6.86%	27,449
Computer Sciences	689	0.88%	683	-21.76%	873	40.13%	623	-37.01%	989
Math. & Computer Sciences, NEC	16,828	-13.31%	19,411	6.58%	18,213	-17.47%	22,069	-8.73%	24,181
Environmental Sciences, Total	4,952	-21.82%	6,318	169.77%	2,342	-18.60%	2,877	26.24%	2,279
Atmospheric Sciences	134,183	0.59%	133,399	-3.54%	138,290	10.29%	125,383	25.45%	99,944
Geological Sciences	57,012	4.05%	54,786	-14.29%	63,918	22.13%	52,334	14.26%	45,804
Oceanography	22,502	-8.32%	24,544	6.99%	22,941	3.50%	22,166	17.77%	18,822
Environmental Sciences, NEC	13,544	1.77%	13,308	-22.82%	17,242	91.09%	9,023	3.50%	8,718
Engineering Total	41,125	0.88%	40,761	19.22%	34,189	-18.33%	41,860	57.37%	26,600
Aeronautical	158,263	24.01%	127,621	-0.11%	127,757	-2.00%	130,360	7.42%	121,350
Astronautical	79,043	71.19%	46,172	16.85%	39,513	-7.55%	42,738	-4.98%	44,980
Chemical	13,988	5.39%	13,254	-37.61%	21,244	2.28%	20,770	77.93%	11,673
Civil	2,758	8.37%	2,545	43.22%	1,777	-20.42%	2,233	1.04%	2,210
Electrical	1,253	596.11%	180	11.11%	162	-55.00%	360	138.41%	151
Mechanical	8,985	4.08%	8,633	15.01%	7,506	-25.32%	10,051	13.08%	8,890
Metallurgy and Materials	11,725	0.18%	11,704	11.47%	10,500	-9.27%	11,573	20.80%	9,580
Engineering, NEC	16,728	-19.59%	20,804	6.97%	19,448	-4.50%	20,365	7.54%	18,938
Life Sciences, Total	23,803	-2.16%	24,329	-11.87%	27,607	23.96%	22,270	-10.66%	24,928
Biological, Total	41,951	-4.07%	43,731	3.09%	42,420	4.99%	40,405	28.75%	31,383
Biol. Sciences (Excluding Envir. Bio.)	25,879	-3.14%	26,718	-3.30%	27,629	-0.16%	27,672	36.19%	20,318
Environmental Biology	22,228	-10.52%	24,840	1.37%	24,505	-3.02%	25,267	46.93%	17,197
Agricultural Sciences	1,325	-2.50%	1,359	-42.37%	2,358	23.26%	1,913	-24.60%	2,537
Medical Sciences	2,326	348.17%	519	-32.25%	766	55.69%	492	-15.75%	584
Life Sciences, NEC	7,485	-4.58%	7,844	31.13%	5,982	5.97%	5,645	-9.16%	6,214
Psychology Total	8,587	-6.35%	9,169	4.09%	8,809	24.26%	7,088	46.11%	4,851
Biological Aspects	5,111	18.05%	4,328	4.97%	4,123	62.13%	2,543	-33.83%	3,943
Social Aspects	73	17.74%	62	55.00%	40	-43.66%	71	-16.47%	85
Psychological Sciences, NEC	397	-19.47%	493	-8.70%	540	-10.45%	603	-36.53%	950
Social Sciences, Total	4,641	23.01%	3,773	6.49%	3,543	89.57%	1,869	-33.44%	2,808
Economics	163	-57.77%	386	124.42%	172	4.24%	165	96.43%	84
History	0	-100.00%	55	-58.33%	132	76.00%	75	N/A	0
Political Science	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Social Sciences, NEC	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Other Sciences, NEC	163	-50.76%	331	727.50%	40	-55.56%	90	7.14%	84
Other Sciences, Total	34,931	40.76%	24,812	12.49%	22,057	20.01%	18,380	10.66%	16,809

Table does not include awards to foreign universities or awards to California Institute of Technology for operation of the Jet Propulsion Laboratories.

* This report does not include other activities related to science and engineering, R&D plant and equipment, nor training grants. ** NEC means Not Elsewhere Classified.

* This chart does not include agreements with Fiscal Year obligations less than zero.

Prior year's data are reviewed for consistency, and when necessary, are revised. Prior year's data should be restricted to this chart.

TABLE OF CONTENTS

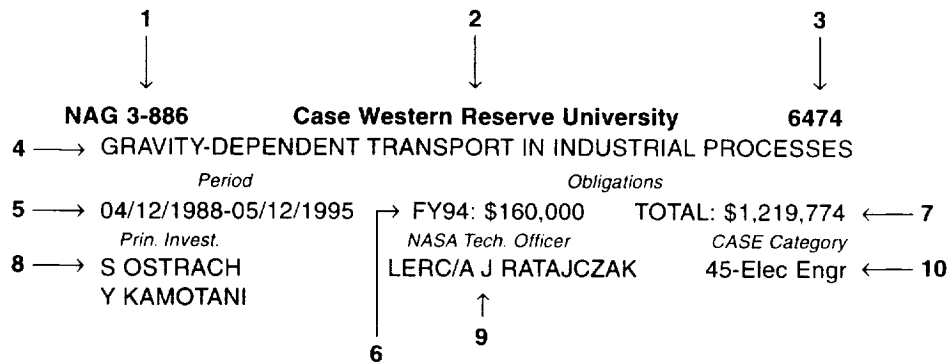
This report includes data on projects active during Fiscal Year 1994.

Alabama	1	Montana	287
Alaska	14	Nebraska	289
Arizona	17	Nevada	291
Arkansas	36	New Hampshire	292
California	37	New Jersey	298
Colorado	111	New Mexico	304
Connecticut	134	New York	309
Delaware	137	North Carolina	336
District of Columbia	139	North Dakota	345
Florida	143	Ohio	345
Georgia	158	Oklahoma	372
Hawaii	167	Oregon	373
Idaho	174	Pennsylvania	377
Illinois	174	Rhode Island	395
Indiana	190	South Carolina	400
Iowa	198	South Dakota	403
Kansas	204	Tennessee	404
Kentucky	207	Texas	410
Louisiana	209	Utah	440
Maine	213	Vermont	444
Maryland	214	Virginia	445
Massachusetts	236	Washington	468
Michigan	262	West Virginia	478
Minnesota	275	Wisconsin	480
Mississippi	280	Wyoming	490
Missouri	282	Foreign Countries	491
Appendix/Cross Index by Field of Science and Engineering		497	

USER'S GUIDE

The University Program Report provides current information and related statistics for each grant/contract/cooperative agreement active during the report period. The following guidance is provided as an aid to the reader in readily locating material of interest and in optimizing the use of this document.

i. Typical Citation



Key

1. Agreement Number*
2. Institution Name
3. Accession Number
4. Brief work description
5. Approximate period of performance
6. Amount (if any) actually provided the indicated fiscal year
7. Total amount actually provided during the indicated period of performance
8. Principal Investigator(s) at the educational institution
9. NASA Technical Officer(s) and organizational location
10. CASE Field of Science and Engineering code and name

* Uniquely identifies project. Prefixes denote type of instrument as follows:

Grants
Cooperative Agreements
Contracts
Space Act Agreements
NAG, NAGW, NGF, NGT, NGL, NGR, NSG
NCC, NCCW
DEN, NAS, NASR, NASW, NSR
NCA

II. NASA Installations

NASA installations are included in the citation as abbreviations (item 9). The following listing of installations will be useful to those desiring further information on specific projects.

Mr. Gary Gans Code FET NASA Headquarters Washington, DC 20546-0001 (202) 358-1540	HQ	Mr. Roger A. Hathaway Mail Stop 400 Langley Research Center Hampton, VA 23681-0001 (804) 864-4000 E-mail: r.a.hathaway@larc.nasa.gov	LARC
Ms. Meredith Moore Mail Stop 241-3 Ames Research Center Moffett Field, CA 94035 (415) 604-5624 E-mail: mmoore@qmgate.arc.nasa.gov	ARC	Dr. Francis J. Montegani Mail Stop CP-1 Lewis Research Center 21000 Brookpark Road Cleveland, OH 44135 (216) 433-2956 E-mail: fjm@lerc.nasa.gov	LERC
Dr. Gerald Soffen Code 160 Goddard Space Flight Center Greenbelt, MD 20771 (301) 286-9690 E-mail: gsoffen@ccmail.gsfc.nasa.gov	GSFC	Dr. Frank Six Mail Stop DS01 George C. Marshall Space Flight Center Huntsville, AL 35812 (205) 544-0997 E-mail: frank.six%ccmail@x400gw.msfc.nasa.gov	MSFC
Dr. Donn Sickorez Mail Code AP-2 Lyndon B. Johnson Space Center Houston, TX 77058 (713) 483-4724 E-mail: donn.sickorez@jsc.nasa.gov	JSC	Dr. Armond Joyce Science and Technology Branch Mail Stop MA00 John C. Stennis Space Center Stennis Space Center, MS 39529 (601) 688-3830	SSC
Mr. Greg Buckingham Mail Stop HM-CIC Kennedy Space Center Kennedy Space Center, FL 32899 (407) 867-7952	KSC		

The abbreviation for NASA Headquarters, HQ, usually carries a suffix, for example HQ-SB, which denotes a particular office code and general area of responsibility. A full listing of the suffix letters and information on NASA's organizational structure may be found in the NASA Headquarters Telephone Directory. (The Directory is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

III. CASE Fields of Science and Engineering

The National Science Foundation (NSF) operates a government-wide system (CASE) for collecting and analyzing data on support to colleges and universities. Participating agencies report annually to NSF which in turn issues *Support to Universities, Colleges and Selected Nonprofit Institutions*. The CASE fields, used in the extensive tabulations contained in that document, form the only consistent classification system for government sponsored research. The fields are listed in full in the Appendix.

IV. Cross-Index

The cross-indexed Appendix provides rapid access to all projects in a particular area of endeavor, as defined by the CASE fields. This listing is also easily used to determine the institutions and principal investigators conducting NASA projects in a field. Entries are related to the citations (descriptions) by the accession number (item 3). The accession number has meaning only in this report; it is in no way permanently associated with nor does it uniquely identify a specific grant/contract/cooperative agreement anywhere except in the present report. Accession numbers are assigned sequentially to the citations, beginning with 1000. Thus, when an entry of interest is identified in the Appendix, the associated accession number allows ready location of the full description in the body of the report.

NASA'S UNIVERSITY PROGRAM

ALABAMA

NAG 3-1408 **Alabama A&M University** **1000**
 INTEGRATED OPTICS IN THIN FILMS OF POLYMERS AND ORGANIC MATERIALS
Period *Obligations*
 01/13/1993-01/11/1995 FY94: \$215,000 TOTAL: \$515,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P VENKETESWARLU LERC/G ADAMOUSHY 13-Physics
 H ABDELDAYEM LERC/G M BEHEIM

NAG 3-1429 **Alabama A&M University** **1001**
 DIRECT OBSERVATION OF CRYSTAL GROWTH FROM SOLUTION USING OPTICAL INVESTIGATIONS AS A GROWING CRYSTAL FACE
Period *Obligations*
 01/07/1993-12/23/1995 FY94: \$214,476 TOTAL: \$376,830
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R B LAL LERC/T GLASGOW 47-Materials Engr

NAG 8-97 **Alabama A&M University** **1002**
 GRANT ENTITLED 'MECHANISM OF CHROMOSOMAL ABERRATION PRODUCTION IN REPAIR DEFICIENT HUMAN CELLS.'
Period *Obligations*
 01/28/1988-06/24/1994 FY94: \$0 TOTAL: \$277,492
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R KALE MSFC/J L RANDALL 59-Life Sci, NEC
 MSFC/R J WALKER

NAG 8-107 **Alabama A&M University** **1003**
 NONLINEAR PROPERTIES OF ORGANIC MATERIALS IN LEAD AND TIN FLUOROPHOSPHATE GLASS AND THIN FILMS POLYMER
Period *Obligations*
 08/22/1988-12/07/1993 FY94: \$0 TOTAL: \$746,794
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M C GEORGE MSFC/J L RANDALL 13-Physics
 MSFC/R J WALKER

NAG 8-125 **Alabama A&M University** **1004**
 GROWTH CHARACTERISTICS OF ORGANIC CRYSTALS FOR NON-LINEAR OPTICAL APPLICATIONS
Period *Obligations*
 04/24/1989-10/21/1994 FY94: \$164,724 TOTAL: \$435,282
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M D AGGARWAL MSFC/J L RANDALL 13-Physics
 MSFC/R J WALKER

NAG 8-173 **Alabama A&M University** **1005**
 ELLIPSOMETRIC MEASUREMENT OF LIQUID FILM THICKNESS
Period *Obligations*
 09/21/1990-12/11/1993 FY94: \$0 TOTAL: \$145,544
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K J CHANG MSFC/G H FICHTL 13-Physics

NAG 8-198 **Alabama A&M University** **1006**
 BIOLOGICAL PATTERNS AS NOVEL INDICATORS FOR PHARMACOLOGICAL STUDIES
Period *Obligations*
 08/21/1991-12/12/1994 FY94: \$35,013 TOTAL: \$72,659
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J JOHNSON MSFC/H MATSOS 51-Biological Sci
 MSFC/E M STRAUSS

NAG 8-200 **Alabama A&M University** **1007**
 REGULARIZED TIME SERIES DISCRIMINANT ANALYSIS
Period *Obligations*
 08/20/1991-08/19/1994 FY94: \$26,259 TOTAL: \$141,765
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E C TEMPLE MSFC/G H FICHTL 29-Math/Computer, NEC
 MSFC/R J WALKER

NAG 8-201 **Alabama A&M University** **1008**
 NUMERICAL INVESTIGATIONS IN THE BACKFLOW REGION OF A VACUUM PLUME
Period *Obligations*
 08/30/1991-10/31/1994 FY94: \$115,309 TOTAL: \$225,140
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 LIAU MSFC/G FICHTL 31-Atmos Sci

NAG 8-203 **Alabama A&M University** **1009**
 EFFECT OF HYDROGEN ON Ni BASED SUPERALLOYS
Period *Obligations*
 12/16/1991-10/31/1994 FY94: \$29,300 TOTAL: \$187,716
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R B LAL MSFC/G H FICHTL 13 Physics
 M D AGGARWAL

NAG 8-236 **Alabama A&M University** **1010**
 RESEARCH
Period *Obligations*
 04/13/1992-04/12/1993 FY94: \$0 TOTAL: \$98,611
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C W LOWE MSFC/G H FICHTL 19-Phys Sci, NEC

NAG 8-251 **Alabama A&M University** **1011**
 CRYSTAL RESEARCH
Period *Obligations*
 12/28/1992-12/27/1993 FY94: \$0 TOTAL: \$134,797
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R B LAL MSFC/G A FICHTL 13-Physics
 A K BATRA

NAG 8-907 **Alabama A&M University** **1012**
 FEASIBILITY STUDY
Period *Obligations*
 03/19/1992-03/31/1993 FY94: \$1,679 TOTAL: \$41,321
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P VENKATESWARLU MSFC/K R TAYLOR 13-Physics

NAG 8-1039 **Alabama A&M University** **1013**
 ORGANIC FIBER OPTICS SENSORS
Period *Obligations*
 05/02/1994-05/01/1995 FY94: \$131,492 TOTAL: \$131,492
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C LOWE MSFC/R WALKER 54-Env Biology

NAG 9-246 **Alabama A&M University** **1014**
 GENETIC EFFECTS HEAVY IONS IN DROSOPHILA
Period *Obligations*
 07/01/1987-09/01/1994 FY94: \$0 TOTAL: \$305,265
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P KALE JSC/D S NACHTWEY 51-Biological Sci

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NAG 9-758 Alabama A&M University 1015
 ENUMERATION, DETECTION OF HETEROTROPHIC BACTERIA IN
 POTABLE WTERS FOR THE SPACE STATION
Period Obligations
 09/16/1994-08/31/1997 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
 M G TADROS JSC/R L SAUER 51-Biological Sci

NAS 8-36634 Alabama A&M University 1016
 SOLUTION CRYSTAL GROWTH IN LOW-GRAVITY
Period Obligations
 09/25/1986-02/06/1995 FY94: \$125,000 TOTAL: \$1,654,975
Prin. Invest. NASA Tech. Officer CASE Category
 R B LAL MSFC/R C RUFF 51-Biological Sci

NCC 8-27 Alabama A&M University 1017
 CHARACTERIZATION OF ORGANIC SPHERICAL POLYMER-DYE
 LASER MATERIALS AND THEIR LASER ACTION
Period Obligations
 09/07/1993-09/06/1994 FY94: \$0 TOTAL: \$54,407
Prin. Invest. NASA Tech. Officer CASE Category
 P VENKATESWARLU MSFC/G H FICHTL 13-Physics
 MSFC/R J WALKER

NAG 1-1329 Auburn University 1018
 DUPLICATION AND ANALYSIS OF MICROMETEOROID DAMAGE ON
 LDEF
Period Obligations
 08/12/1991-12/31/1994 FY94: \$48,000 TOTAL: \$282,715
Prin. Invest. NASA Tech. Officer CASE Category
 M F ROSE LARC/J L JONES 39-Env Sci, NEC
 LARC/W H KINARD

NAG 1-1467 Auburn University 1019
 COMPUTATIONAL AEROACOUSTICS ANALYSIS OF DISSIPATIVE
 DUCTS NLPN 92-921
Period Obligations
 03/02/1993-11/01/1994 FY94: \$0 TOTAL: \$55,063
Prin. Invest. NASA Tech. Officer CASE Category
 M J CROCKER LARC/W R WATSON 41-Aero Engr
 LARC/F FARASSAT

NAG 3-1154 Auburn University 1020
 HIGH PERFORMANCE ELECTROCHEMICAL SYSTEMS UTILIZING
 COMPOSITE ELECTRODE STRUCTURES
Period Obligations
 03/22/1990-01/24/1995 FY94: \$93,000 TOTAL: \$426,250
Prin. Invest. NASA Tech. Officer CASE Category
 B J TATARCHUK LERC/D L BRITTON 43-Chem Engr
 LERC/M A REID

NAG 3-1507 Auburn University 1021
 INFLUENCE OF BACKUP BEARINGS AND SUPPORT STRUCTURE D
 YNAMICS ON THE BEHAVIOR OF ROTORS WITH ACTIVE SUP
Period Obligations
 06/29/1993-06/17/1995 FY94: \$35,000 TOTAL: \$83,273
Prin. Invest. NASA Tech. Officer CASE Category
 G T FLOWERS LERC/C LAWRENCE 41-Aero Engr

NAG 8-147 Auburn University 1022
 JOVE
Period Obligations
 03/23/1990-04/25/1994 FY94: \$0 TOTAL: \$110,365
Prin. Invest. NASA Tech. Officer CASE Category
 J D PEREZ MSFC/C R CHAPPELL 31-Atmos Sci

NAG 8-808 Auburn University 1023
 DESIGN OF THE GATE-TDE
Period Obligations
 01/09/1990-09/30/1993 FY94: \$0 TOTAL: \$105,481
Prin. Invest. NASA Tech. Officer CASE Category
 M E GREENE MSFC/C C RUPP 41-Aero Engr

NAG 8-923 Auburn University 1024
 ANALYSIS OF ADVANCED SRM INIGATION PHENOMENA
Period Obligations
 08/20/1992-06/18/1994 FY94: \$0 TOTAL: \$85,172
Prin. Invest. NASA Tech. Officer CASE Category
 W A FOSTER MSFC/J E HENGEL 49-Engr, NEC
 R M JENKINS MSFC/C L MARTIN

NAG 8-977 Auburn University 1025
 NUMERICAL INVESTIGATION OF THERMAL CREEP AND THERMAL
 STRESS EFFECTS IN MICROGRAVITY PHYSICAL VAPOR
Period Obligations
 07/16/1993-07/31/1995 FY94: \$45,000 TOTAL: \$90,000
Prin. Invest. NASA Tech. Officer CASE Category
 D W MACKOWSKI MSFC/B G PENN 46-Mech Engr
 MSFC/D O FRAZIER

NAG 8-1017 Auburn University 1026
 SUMMER FACULTY FELLOWSHIP PROGRAM
Period Obligations
 11/16/1993-11/15/1994 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
 R J HARTFIELD MSFC/R H ESKRIDGE 41-Aero Engr
 MSFC/C C DOBSON

NAG 8-1019 Auburn University 1027
 MINORITY FOCUS PROGRAM
Period Obligations
 01/25/1994-01/24/1995 FY94: \$73,559 TOTAL: \$73,559
Prin. Invest. NASA Tech. Officer CASE Category
 L MOORE MSFC/J HALE 22-Computer Science
 MSFC/F SIX

NAG 8-1040 Auburn University 1028
 OCTAVE POST PROCESSOR FOR COMPUTER AIDED CONTROL
 SYSTEM DESIGN
Period Obligations
 03/25/1994-03/24/1995 FY94: \$37,183 TOTAL: \$37,183
Prin. Invest. NASA Tech. Officer CASE Category
 A S HODEL MSFC/M E JACKSON 22-Computer Science
 MSFC/S G RYAN

NAG 8-1058 Auburn University 1029
 DEVELOPING CHEMICAL DOUBLE LAYER TECHNOLOGY FOR
 ELECTRICAL ACTUATION APPLICATIONS
Period Obligations
 06/09/1994-06/08/1995 FY94: \$99,997 TOTAL: \$99,997
Prin. Invest. NASA Tech. Officer CASE Category
 S A MERRYMAN MSFC/D K HALL 45-Elec Engr
 MSFC/S L LUNA

NAGW 1192 Auburn University 1030
 CENTER FOR COMMERCIAL DEVELOPMENT OF SPACE
Period Obligations
 11/16/1987-10/31/1994 FY94: \$2,050,000 TOTAL: \$15,143,973
Prin. Invest. NASA Tech. Officer CASE Category
 R ASKEW HQ/W A ORAN 42-Astro Engr
 HQ/R P WHITTEN

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NAGW 4005 Auburn University 1031
ION HOLES AND WEAK DOUBLE LAYERS IN A MAGNETIZED PLASMA
Period *Obligations*
05/11/1994-05/31/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S F KNOWLTON HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAS 5-30759 Auburn University 1032
GAMMA-RAY IMAGING DEVICE ON A BALLON
Period *Obligations*
02/22/1990-09/30/1993 FY94: \$0 TOTAL: \$318,304
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L GREENE GSFC/C CRANNELL 19-Phys Sci, NEC

NAS 8-39131 Auburn University 1033
ESSENTIAL ENGINEERING SERVICES RESEARCH AND DEVELOPM CAPABILITY
Period *Obligations*
04/26/1991-06/21/1995 FY94: \$285,937 TOTAL: \$1,228,115
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J OWEN MSFC/L J SMITH 99-Multi-Discip
MSFC/D HIPP

NCC 3-175 Auburn University 1034
SILICON DEVICE PERFORMANCE MEASUREMENTS TO SUPPORT TEMPERATURE RANGE ENHANCEMENT
Period *Obligations*
06/05/1990-12/31/1993 FY94: \$0 TOTAL: \$157,795
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W JOHNSON LERC/E D BAUMANN 45-Elec Engr
R F ASKEW LERC/I T MYERS

NCC 9-27 Auburn University 1035
EVALUATION OF HYPERVELOCITY IMPACT CAPTURE MEDIA AT VELOCITIES ON 10KM/S
Period *Obligations*
06/21/1994-06/20/1995 FY94: \$22,740 TOTAL: \$22,740
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M F ROSE JSC/M J CINTALA 13-Physics

NGT 00-050-402 Auburn University 1036
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/28/1989-03/15/1994 FY94: \$0 TOTAL: \$68,084
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J CROCKER HQ/F C OWENS 46-Mech Engr

NGT 00-050-435 Auburn University 1037
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/13/1989-06/30/1993 FY94: \$10 TOTAL: \$61,990
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M E BAGINSKI HQ/F C OWENS 45-Elec Engr

NGT 00-050-824 Auburn University 1038
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/16/1991-08/31/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B Z JANG HQ/F C OWENS 49-Engr, NEC

NGT 00-050-974 Auburn University 1039
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/04/1992-06/30/1995 FY94: \$22,000 TOTAL: \$55,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S RAO LARC/E PRIOR 45-Elec Engr

NGT 00-051-043 Auburn University 1040
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/23/1993-09/14/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B Z JANG MSFC/F SIX 47-Materials Engr

NGT 00-051-046 Auburn University 1041
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/12/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D PEREZ MSFC/F SIX 13-Physics

NGT 00-051-149 Auburn University 1042
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/19/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MCCREARY HQ/D HOLLAND 22-Computer Science

NGT 00-051-246 Auburn University 1043
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M RAO LARC/L EVANS 45-Elec Engr

NGT 00-070-312 Auburn University 1044
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
05/18/1993-06/15/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G T FLOWERS HQ/D K RUSSEL 46-Mech Engr

NGT 00-070-384 Auburn University 1045
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
08/25/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S C SINHA HQ/D K RUSSELL 46-Mech Engr

NGT 00-070-398 Auburn University 1046
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
09/29/1994-08/07/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R HANSEN HQ/D K RUSSELL 73-History

NAG 8-997 Oakwood College 1047
JOVE
Period *Obligations*
02/03/1994-05/31/1995 FY94: \$41,447 TOTAL: \$41,447
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A PAUL MSFC/F SIX 54-Env Biology

**NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)**

NAS 8-40194 **Oakwood College** **1048**
FREETAPE RESEARCH
Period *Obligations*
07/28/1994-01/27/1996 FY94: \$122,970 TOTAL: \$122,970
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M ARMOUR MSFC/H WAITES 22-Computer Science
MSFC/G MYERS

NCC 8-10 **Oakwood College** **1049**
PROPOSED ASSESSMENT OF VIRTUAL REALITY FOR HUMAN IN
CONTROL MISSIONS
Period *Obligations*
09/23/1992-10/31/1993 FY94: \$0 TOTAL: \$26,047
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H R DESSAU MSFC/G H FICHTL 49-Engr, NEC
M DAVIS

NGT 00-090-073 **Oakwood College** **1050**
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/12/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E A COOPER HQ/D RUSSELL 99-Multi-Discip

NAGW 3969 **Selma University** **1051**
NAGW-3969/B/SELMA UNIV/36 MONTHS/FEASIBILITY OF
DEGRADATION OF CHLORINATED SOLVENTS
Period *Obligations*
05/14/1994-05/31/1994 FY94: \$204,900 TOTAL: \$204,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K D CHAPATWALA JPL/R M TRUNZO 39-Env Sci, NEC

NAGW 4089 **Trenholm State Technical College** **1052**
SCIENCE ENRICHMENT PROGRAM
Period *Obligations*
07/28/1994-04/30/1995 FY94: \$177,661 TOTAL: \$177,661
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S C KAUSHNIK HQ/P J SAKIMOTO 99-Multi-Discip

NAG 1-1549 **Tuskegee University** **1053**
INVESTIGATION OF TECHNIQUES FOR SPECTRAL ANALYSIS AND
ESTIMATION OF TURBULENCE SCALES FROM RANDOMLY
Period *Obligations*
11/04/1993-11/03/1995 FY94: \$110,000 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D SREE LARC/S O KIELGARD 41-Aero Engr

NAG 2-4006 **Tuskegee University** **1054**
A LOW COST SIMULATION SYSTEM TO DEMONSTRATE PILOT
INDUCED OSCILLATION PHENOMENA
Period *Obligations*
05/12/1994-08/31/1995 FY94: \$59,951 TOTAL: \$59,951
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S F ALI ARC/L SCHILLING 41-Aero Engr
ARC/M EVANS

NAG 3-726 **Tuskegee University** **1055**
ELECTRODE EROSION IN LOW POWER CONSTRUCTED AIRJET
THRUSTERS
Period *Obligations*
04/23/1986-02/07/1993 FY94: TOTAL: \$143,652
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P R RAY LERC/T L HARDY 49-Engr, NEC

NAG 3-1388 **Tuskegee University** **1056**
SPUTTERING EROSION ON THE ION THRUSTER
Period *Obligations*
12/04/1992-11/30/1994 FY94: \$99,748 TOTAL: \$259,366
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K RAY LERC/V K RAWLIN 13-Physics

NAG 3-1582 **Tuskegee University** **1057**
SPUTTERING EROSION OF INSULATOR WALLS IN THE STAT
IONARY PLASMA THRUSTER
Period *Obligations*
03/22/1994-03/22/1995 FY94: \$155,293 TOTAL: \$155,293
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K RAY LERC/E J PENCIL 45-Elec Engr

NAG 8-40 **Tuskegee University** **1058**
EFFECTS OF INTERACTION OF PROTONS ELECTRONS AND
CONRONA DISCHARGES ON THE ELECTRICAL INSULATING
Period *Obligations*
09/19/1985-09/30/1994 FY94: \$32,176 TOTAL: \$427,183
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C V DORESWAMY MSFC/G H FICHTL 45-Elec Engr
MSFC/R W WALKER

NAG 8-131 **Tuskegee University** **1059**
EFFECTS OF ENVIRONMENT/ COMBINED COMPRESSION SHEAR
ON RESPONSE OF THERMOPLASTIC COMPOSITES
Period *Obligations*
08/21/1989-08/31/1993 FY94: \$5,762 TOTAL: \$161,520
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S JEGLANI MSFC/J L RANDALL 47-Materials Engr

NAG 8-296 **Tuskegee University** **1060**
MAIN ENGINE STUDY
Period *Obligations*
05/20/1993-12/31/1994 FY94: \$9,900 TOTAL: \$59,840
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C J WANG MSFC/B WALKER 29-Math/Computer, NEC

NAGW 2940 **Tuskegee University** **1061**
CENTER FOR FOOD PRODUCTION, PROCESSING AND WASTE M
ANAGEMENT
Period *Obligations*
03/12/1992-12/31/1995 FY94: \$1,449,657 TOTAL: \$3,065,809
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W A HILL HQ/S E MASSENBERG 99-Multi-Discip
HQ/S HARTMAN

NAGW 3472 **Tuskegee University** **1062**
MECHANICAL PROPERTY CHARACTERIZATION OF REFRACTOR Y
COMPOSITES
Period *Obligations*
03/30/1993-07/31/1995 FY94: \$41,500 TOTAL: \$314,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S JEELANI HQ/S STOVALL-ALEXANDER 99-Multi-Discip

NAG10-125 **Tuskegee University** **1063**
RESEARCH AND DEVELOPMENT OF MATERIALS PROTECTIVE
CLOTHING
Period *Obligations*
07/12/1993-07/25/1995 FY94: \$100,000 TOTAL: \$199,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N VAHDAT KSC/K THOMPSON 12-Chemistry

NASA'S UNIVERSITY PROGRAM **ALABAMA (Continued)**

NAG 8-928 University of Alabama - Birmingham 1064
 MEASUREMENT OF MASS SPECTRUM SPECIES
Period Obligations
 07/29/1992-10/28/1992 FY94 TOTAL: \$5,783
Prin. Invest. NASA Tech. Officer CASE Category
 T J WDOWIAK MSFC/P A CURRERI 13-Physics

NAGW 749 University of Alabama - Birmingham 1065
 COSMIC ICES/MOLECULES: A LABORATORY INVESTIGATION
Period Obligations
 06/01/1985-02/28/1994 FY94: \$0 TOTAL: \$276,054
Prin. Invest. NASA Tech. Officer CASE Category
 T J WDOWIAK HQ/F C GILLET 13-Physics
 HQ/E J WEILER

NAGW 813 University of Alabama - Birmingham 1066
 MICRO MOLECULAR CRYSTALLAGRAPY IN SPACE
Period Obligations
 09/15/1985-10/31/1994 FY94: \$1,900,000 TOTAL: \$13,578,180
Prin. Invest. NASA Tech. Officer CASE Category
 C E BUGG HQ/A VILLAMIL 51-Biological Sci
 K M PRUITT HQ

NAGW 1512 University of Alabama - Birmingham 1067
 THE CHEMICAL BASIS FOR THE ORIGIN OF THE GENETIC CODE AND
Period Obligations
 11/28/1988-11/30/1994 FY94: \$0 TOTAL: \$519,299
Prin. Invest. NASA Tech. Officer CASE Category
 J C LACEY HQ/M MEYER 12-Chemistry

NAGW 3081 University of Alabama - Birmingham 1068
 COMBINED BACKSCATTER MOSSBAUER SPECTROMETER/X-RAY
 FLUORESCENCE ANALYZER FOR PLANETARY SURFACE MATERIA
Period Obligations
 05/15/1992-04/30/1995 FY94: \$61,400 TOTAL: \$240,800
Prin. Invest. NASA Tech. Officer CASE Category
 D C AGRESTI HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3902 University of Alabama - Birmingham 1069
 VACUUM UV SPECTROSCOPY OF IONS OF AROMATIC SPECIES OF
 ASTROPHYSICAL INTERNET
Period Obligations
 03/28/1994-02/28/1995 FY94: \$22,705 TOTAL: \$22,705
Prin. Invest. NASA Tech. Officer CASE Category
 T J WDOWIAK HQ/R V STACHNIK 11-Astronomy
 HQ/E J WEILER

NAGW 4041 University of Alabama - Birmingham 1070
 1994 PROTEIN CRYSTAL GROWTH CONFERENCE ON STRUCTURE
 BASED DRUG DESIGN
Period Obligations
 06/27/1994-08/31/1994 FY94: \$10,100 TOTAL: \$10,100
Prin. Invest. NASA Tech. Officer CASE Category
 L J DELUCAS HQ/D LONGEDDY 56-Medical Sciences

NAGW 4079 University of Alabama - Birmingham 1071
 THE IR EMITTING AROMATIC COMPONENT OF THE INTERSTELLAR
 AND CIRCUMSTELLAR MEDIUMS
Period Obligations
 07/13/1994-05/31/1995 FY94: \$32,009 TOTAL: \$32,009
Prin. Invest. NASA Tech. Officer CASE Category
 T J WDOWIAK HQ/M MEYER 13-Physics

NAS 8-36611 University of Alabama - Birmingham 1072
 RESEARCH STUDY ENTITLED 'PROTIEN CRYSTAL GROWTH IN A
 MICROGRAVITY ENVIRONMENT'
Period Obligations
 07/25/1985-12/30/1994 FY94: \$115,000 TOTAL: \$8,405,934
Prin. Invest. NASA Tech. Officer CASE Category
 L DELUCAS MSFC/B HERREN 51-Biological Sci
 L J DELUCAS
 J K BAIRD

NAS 8-38672 University of Alabama - Birmingham 1073
 CRYSTAL GROWTH OF SELECTED II - VI SEMICONDUCTING
 ALLOYS
Period Obligations
 09/17/1990-10/01/1994 FY94: \$0 TOTAL: \$312,847
Prin. Invest. NASA Tech. Officer CASE Category
 R N ANDREWS MSFC/F R SZOFRAN 19-Phys Sci, NEC
 MSFC/D C GILLIES

NAS 8-39717 University of Alabama - Birmingham 1074
 RESEARCH STUDY
Period Obligations
 01/29/1993-01/28/1996 FY94: \$160,000 TOTAL: \$320,000
Prin. Invest. NASA Tech. Officer CASE Category
 J B ANDREWS MSFC/L C YATES 19-Phys Sci, NEC

NAS 8-39762 University of Alabama - Birmingham 1075
 PROTEIN CRYSTAL GROWTH IN MICROGRAVITY
Period Obligations
 10/23/1992-05/31/1994 FY94: \$1,061,595 TOTAL: \$1,786,969
Prin. Invest. NASA Tech. Officer CASE Category
 L J DELUCAS MSFC/K HIGGINBETHAM 19-Phys Sci, NEC

NAS 8-39766 University of Alabama - Birmingham 1076
 CRYSTAL GROWTH STUDY
Period Obligations
 01/08/1993-08/31/1993 FY94: \$0 TOTAL: \$109,796
Prin. Invest. NASA Tech. Officer CASE Category
 L J DELUCAS MSFC/M L PUSEY 13-Physics
 W M ROSENBLUM MSFC/R S SNYDER
 W W WILSON

NAS 8-39962 University of Alabama - Birmingham 1077
 CGF CARTRIDGE AND SEMICONDUCTOR COMPATIBILITY TESTS
Period Obligations
 11/16/1993-12/15/1994 FY94: \$8,705 TOTAL: \$8,705
Prin. Invest. NASA Tech. Officer CASE Category
 B ANDREWS MSFC/D A SCHAEFER 45-Elec Engr
 MSFC/R HOLMES

NAS 8-40189 University of Alabama - Birmingham 1078
 PROTEIN CRYSTAL GROWTH IN MICROGRAVITY
Period Obligations
 04/01/1994-06/01/1997 FY94: \$1,435,000 TOTAL: \$1,435,000
Prin. Invest. NASA Tech. Officer CASE Category
 L J DELUCAS MSFC/H K HIGGINBOTHAM 19-Phys Sci, NEC

NGT 00-050-877 University of Alabama - Birmingham 1079
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/23/1992-05/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 B ANDREWS MSFC/F SIX 47-Materials Engr

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NGT 00-050-879 University of Alabama - Birmingham 1080
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/23/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D G AGRESTI	MSFC/F SIX	13-Physics

NGT 00-050-880 University of Alabama - Birmingham 1081
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
05/29/1992-07/31/1995	FY94: \$22,000	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D L SHEALY	MSFC/F SIX	13-Physics

NGT 00-051-080 University of Alabama - Birmingham 1082
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/02/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R ANDREWS	HQ/D A HOLLAND	47-Materials Engr

NAG 1-1228 University of Alabama - Huntsville 1083
 ANALYSIS OF SURFACES FROM THE LDEF AO114: PHASE II

Period	Obligations	
02/28/1991-12/31/1993	FY94: \$0	TOTAL: \$402,890
Prin. Invest.	NASA Tech. Officer	CASE Category
J GREGORY	LARC/J L JONES	47-Materials Engr
	LARC/L A TEICHMAN	

NAG 1-1534 University of Alabama - Huntsville 1084
 A DETERMINATION OF OPTIMAL CONDITIONS FOR MELT STABILIZATION IN A MAGNETIC FIELD

Period	Obligations	
07/20/1993-03/31/1995	FY94: \$30,849	TOTAL: \$51,447
Prin. Invest.	NASA Tech. Officer	CASE Category
A NADARAJAH	LARC/A L FRIPP	19-Phys Sci, NEC

NAG 3-1373 University of Alabama - Huntsville 1085
 CONTRIBUTION OF CONTAMINANT IONS TO THE ELECTROMAGNETIC ENVIRONMENT OF SPACE STATION FREEDOM

Period	Obligations	
10/07/1992-11/30/1993	FY94: \$0	TOTAL: \$73,071
Prin. Invest.	NASA Tech. Officer	CASE Category
N SINGH	LERC/D B SNYDER	13-Physics
B I VASHI		

NAG 3-1384 University of Alabama - Huntsville 1086
 STABILITY LIMITS AND DYNAMICS OF NONAXISYMMETRIC LIQ UID BRIDGES

Period	Obligations	
11/23/1992-11/18/1995	FY94: \$129,957	TOTAL: \$292,844
Prin. Invest.	NASA Tech. Officer	CASE Category
J I ALEXANDER	LERC/J A SALZMAN	19-Phys Sci, NEC

NAG 5-1756 University of Alabama - Huntsville 1087
 AN INVESTIGATION OF TEMPORAL CORRELATIONS AMONGST GAMMA-RAY BURST SPECTRAL COMPONENTS

Period	Obligations	
08/26/1991-10/31/1994	FY94: \$49,996	TOTAL: \$153,752
Prin. Invest.	NASA Tech. Officer	CASE Category
W PACIESAS	GSFC/J P NORRIS	11-Astronomy
M S BRIGGS	GSFC/C A GEHRELS	

NAG 5-2019 University of Alabama - Huntsville 1088
 AN INVESTIGATION INTO THE FUNDAMENTAL TIME STRUCTURE OF HIGH ENERGY PROCESSES IN SOLAR FLARES

Period	Obligations	
07/08/1992-01/14/1996	FY94: \$50,000	TOTAL: \$127,978
Prin. Invest.	NASA Tech. Officer	CASE Category
G EMSLIEO	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2056 University of Alabama - Huntsville 1089
 GAMMA-RAY BURST DIAGNOSTICS OF PROCESSES IN A STRO NG MAGNETIC FIELD

Period	Obligations	
07/28/1992-07/31/1993	FY94:	TOTAL: \$39,953
Prin. Invest.	NASA Tech. Officer	CASE Category
J J BRAINERD	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2373 University of Alabama - Huntsville 1090
 A SEARCH FOR PRE- AND POST-BURST EMISSION FROM GAMMA-RAY BURST SOURCES

Period	Obligations	
09/23/1993-09/30/1995	FY94: \$60,000	TOTAL: \$60,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A G EMSLIE	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2416 University of Alabama - Huntsville 1091
 TIME-RESOLVED SPECTROSCOPY OF GAMMA-RAY BURSTS

Period	Obligations	
11/06/1993-11/14/1994	FY94: \$50,000	TOTAL: \$50,000
Prin. Invest.	NASA Tech. Officer	CASE Category
W S PACIESAS	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2443 University of Alabama - Huntsville 1092
 IS GD 356 THE FIRST KNOWN WHITE DWARF WITH CORONAL X-RAY EMISSION

Period	Obligations	
12/06/1993-12/14/1994	FY94: \$15,000	TOTAL: \$15,000
Prin. Invest.	NASA Tech. Officer	CASE Category
E Z MUSIELAK	GSFC/R PETRE	11-Astronomy

NAG 5-2627 University of Alabama - Huntsville 1093
 ION ACCELERATION AND TRANSPORT IN SOLAR FLARES

Period	Obligations	
07/11/1994-09/30/1995	FY94: \$50,000	TOTAL: \$50,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J A MILLER	GSFC/R RAMATY	11-Astronomy

NAG 5-2725 University of Alabama - Huntsville 1094
 CGRO/BATSE OBSERVATIONS OF MAGNETOSPHERIC ELECTRON MICROBURSTS

Period	Obligations	
09/21/1994-09/30/1995	FY94: \$10,000	TOTAL: \$10,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J L HOROWITZ	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2735 University of Alabama - Huntsville 1095
 X-RAY BURST SPECTROSCOPY WITH ASCA

Period	Obligations	
09/21/1994-03/31/1996	FY94: \$15,000	TOTAL: \$15,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J VAN PARADIJS	GSFC/N WHITE	11-Astronomy

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NAG 8-108 University of Alabama - Huntsville 1096
 SEMICONDUCTOR
Period Obligations
 05/25/1988-05/31/1995 FY94: \$0 TOTAL: \$84,990
Prin. Invest. NASA Tech. Officer CASE Category
 F D HO MSFC/T EDGE 45-Elec Engr
 MSFC/O A NORTON

NAG 8-129 University of Alabama - Huntsville 1097
 NUMERICAL STUDIES OF THE SURFACE TENSION EFFECT ON THE
 ROTATING HELIUM DEWAR IN GP-B SPACECRAFT.
Period Obligations
 03/29/1989-10/16/1992 FY94: \$0 TOTAL: \$354,928
Prin. Invest. NASA Tech. Officer CASE Category
 R J HUNG MSFC/F W LESLIE 47-Materials Engr
 MSFC/J W KAUFMAN

NAG 8-178 University of Alabama - Huntsville 1098
 PHASE III EVALUATION OF EXPLORATOIN WORKSHOP CONCEPTS
 THE VON BRAUN FORUMS
Period Obligations
 01/23/1991-02/28/1996 FY94: \$36,336 TOTAL: \$153,888
Prin. Invest. NASA Tech. Officer CASE Category
 A H YELLE MSFC/C R CHAPPELL 99-Multi-Discip

NAG 8-212 University of Alabama - Huntsville 1099
 SUMMER RESEARCH PROGRAM
Period Obligations
 01/14/1992-07/09/1993 FY94: \$0 TOTAL: \$425,030
Prin. Invest. NASA Tech. Officer CASE Category
 G R KARR MSFC/F SIX 41-Aero Engr

NAG 8-234 University of Alabama - Huntsville 1100
 PHASE I BIOSPHERE LABORATORY FOR STUDENT RESEARCH
Period Obligations
 03/12/1992-03/29/1995 FY94: \$5,000 TOTAL: \$29,981
Prin. Invest. NASA Tech. Officer CASE Category
 J VAN ALSTINE MSFC/F SIX 51-Biological Sci

NAG 8-239 University of Alabama - Huntsville 1101
 MAGNETOSPHERIC SPACE PLASMA INVESTIGATIONS
Period Obligations
 07/10/1992-07/09/1995 FY94: \$74,000 TOTAL: \$346,000
Prin. Invest. NASA Tech. Officer CASE Category
 R H COMFORT MSFC/T E MOORE 13-Physics
 J L HORWITZ MSFC/G T MCCRANIE

NAG 8-293 University of Alabama - Huntsville 1102
 SUMMER FACULTY FELLOWSHIP RESEARCH CONTINUATION
 PROGRAM
Period Obligations
 03/26/1993-05/26/1994 FY94: \$0 TOTAL: \$107,325
Prin. Invest. NASA Tech. Officer CASE Category
 G KARR MSFC/F SIX 42-Astro Engr

NAG 8-297 University of Alabama - Huntsville 1103
 A SYSTEMIC CHANGE OF SCIENCE EDUCATION
Period Obligations
 07/07/1993-06/30/1994 FY94: \$40,000 TOTAL: \$79,923
Prin. Invest. NASA Tech. Officer CASE Category
 J WRIGHT MSFC/B ANDERSON 51-Biological Sci

NAG 8-767 University of Alabama - Huntsville 1104
 THE GROWTH OF ZINC SELE- NIDE SINGLE CRYSTALS BY PHYSICAL
 VAPOR TRANSPORT IN MICROGRAVITY
Period Obligations
 04/01/1989-08/31/1995 FY94: \$0 TOTAL: \$539,719
Prin. Invest. NASA Tech. Officer CASE Category
 E E ANDERSON MSFC/S L LEHOCZKY 13-Physics
 H Y CHENG
 F E ROSENBERGER

NAG 8-790 University of Alabama - Huntsville 1105
 PROCESS MODELLING FOR MATERIALS PREPARATION
 EXPERIMENTS
Period Obligations
 09/07/1989-05/31/1993 FY94: \$0 TOTAL: \$1,022,937
Prin. Invest. NASA Tech. Officer CASE Category
 F E ROSENBERGER MSFC/S L LEHOCZKY 29-Math/Cmputer,NEC
 J I ALEXANDER
 J OUAZZANI

NAG 8-822 University of Alabama - Huntsville 1106
 THE ROLE OF IONOSPHERIC PLASMAS IN MAGNETOSPHERE
Period Obligations
 08/06/1990-08/05/1993 FY94: \$728 TOTAL: \$153,707
Prin. Invest. NASA Tech. Officer CASE Category
 G R WILSON MSFC/T E MOORE 13-Physics
 J L HORWITZ MSFC/M O CHANDLER

NAG 8-834 University of Alabama - Huntsville 1107
 THEORETICAL AND EXPERIMENTAL STUDIES RELEVANT TO
 INTERPRETATION OF AURORAL EMISSIONS
Period Obligations
 06/20/1990-06/25/1994 FY94: \$0 TOTAL: \$386,766
Prin. Invest. NASA Tech. Officer CASE Category
 C E KEFFER MSFC/S A FIELDS 31-Atmos Sci
 G A GERMANY MSFC/L S REED

NAG 8-839 University of Alabama - Huntsville 1108
 PHYSICS OF WAVES IN THE SOLAR ATMOSPHERE
Period Obligations
 09/11/1990-09/01/1994 FY94: \$0 TOTAL: \$167,751
Prin. Invest. NASA Tech. Officer CASE Category
 Z MUSIELAK MSFC/J M DAVIS 13-Physics
 MSFC/E R REICHMANN

NAG 8-842 University of Alabama - Huntsville 1109
 RESEARCH SUPPORT FOR THE CDTE CRYSTAL GROWTH
Period Obligations
 07/27/1990-08/09/1993 FY94: \$0 TOTAL: \$155,070
Prin. Invest. NASA Tech. Officer CASE Category
 F E ROSENBERGER MSFC/F R SZOFRAN 19-Phys Sci, NEC
 MSFC/G L PERRY

NAG 8-874 University of Alabama - Huntsville 1110
 THE MAGNETIC CONFIGURATION LEADING TO SOLAR FLARES
 MEASUREMENTS AND THEORY
Period Obligations
 06/05/1991-08/08/1994 FY94: \$0 TOTAL: \$161,340
Prin. Invest. NASA Tech. Officer CASE Category
 J M FONTENLA MSFC/J M DAVIS 11-Astronomy
 MSFC/E J REICHMANN

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NAG 8-888 University of Alabama - Huntsville 1111
 DEVELOPMENT, REFINEMENT AND TESTING OF A SHORT TERM
 SOLAR FLARE PREDICTION ALGORITHM
Period Obligations
 08/05/1991-01/31/1994 FY94: \$0 TOTAL: \$71,860
Prin. Invest. NASA Tech. Officer CASE Category
 J B SMITH MSFC/E J REICHMANN 31-Atmos Sci
 MSFC/J M DAVIS

NAG 8-904 University of Alabama - Huntsville 1112
 A DATA AND INFORMATION SYSTEM FOR PROCESSING, ARCHIVAL
 AND DISTRIBUTION OF DATA FOR RESEARCH
Period Obligations
 03/25/1992-03/24/1993 FY94: TOTAL: \$279,649
Prin. Invest. NASA Tech. Officer CASE Category
 S J GRAVES MSFC/H M GOODMAN 22-Computer Science

NAG 8-931 University of Alabama - Huntsville 1113
 BREADBOARD ACTIVITIES FOR ADVANCED PROTEIN CRYSTAL
 GROWTH
Period Obligations
 08/03/1992-08/03/1994 FY94: \$0 TOTAL: \$63,337
Prin. Invest. NASA Tech. Officer CASE Category
 F ROSENBERG MSFC/M L PUSEY 19-Phys Sci, NEC

NAG 8-938 University of Alabama - Huntsville 1114
 STUDIES OF SURFACE TENSION ON ROTATING HELIUM
Period Obligations
 09/14/1992-09/30/1993 FY94: \$0 TOTAL: \$128,136
Prin. Invest. NASA Tech. Officer CASE Category
 R J HUNG MSFC/J W KAUFMAN 13-Physics

NAG 8-950 University of Alabama - Huntsville 1115
 CRYSTAL GROWTH STUDY
Period Obligations
 02/12/1993-01/31/1995 FY94: \$198,797 TOTAL: \$373,318
Prin. Invest. NASA Tech. Officer CASE Category
 F ROSENBERG MSFC/D CARTER 31-Atmos Sci

NAG 8-955 University of Alabama - Huntsville 1116
 CHARACTERIZATION OF SURFACES
Period Obligations
 03/11/1993-05/31/1994 FY94: TOTAL: \$29,984
Prin. Invest. NASA Tech. Officer CASE Category
 J M VAN ALSTINE MSFC/R S SNYDER 12-Chemistry

NAG 8-984 University of Alabama - Huntsville 1117
 CRYSTAL RESEARCH
Period Obligations
 12/06/1993-01/31/1995 FY94: \$55,423 TOTAL: \$55,423
Prin. Invest. NASA Tech. Officer CASE Category
 A NADARAJAH MSFC/M L PUSEY 19-Phys Sci, NEC

NAG 8-987 University of Alabama - Huntsville 1118
 EXPLORATIONS IN SUPERCOMPUTING
Period Obligations
 11/02/1993-04/01/1995 FY94: \$422,000 TOTAL: \$422,000
Prin. Invest. NASA Tech. Officer CASE Category
 J ZIEBARTH MSFC/W ANDERSON 29-Math/Computer, NEC

NAG 8-1028 University of Alabama - Huntsville 1119
 TECHNOLOGY REINVESTMENT PROGRAM
Period Obligations
 03/16/1994-03/15/1997 FY94: \$298,448 TOTAL: \$298,448
Prin. Invest. NASA Tech. Officer CASE Category
 J O DIMMOCK MSFC/J CARLISLE 49-Engr, NEC

NAG 8-1029 University of Alabama - Huntsville 1120
 TECHNOLOGY REINVESTMENT PROGRAM
Period Obligations
 03/16/1994-03/15/1996 FY94: \$268,604 TOTAL: \$268,604
Prin. Invest. NASA Tech. Officer CASE Category
 B J SCHROER MSFC/J CARLISLE 49-Engr, NEC

NAG 8-1032 University of Alabama - Huntsville 1121
 DEVELOPMENT TESTING OF SHORT TERM SOLAR PREDICTION
 ALGORITHM
Period Obligations
 02/14/1994-02/15/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 P C SCHMIDTKE MSFC/J VARGAS 11-Astronomy

NAG 8-1036 University of Alabama - Huntsville 1122
 ON COMPLEXITY OF SOLAR MAGNETIC FIELD AND HEATING IN
 SOLAR CORONAL HLOS
Period Obligations
 02/09/1994-02/08/1995 FY94: \$28,160 TOTAL: \$28,160
Prin. Invest. NASA Tech. Officer CASE Category
 Z E MUSIELAK MSFC/J M DAVIS 11-Astronomy
 MSFC/E J REICHMANN

NAG 8-1071 University of Alabama - Huntsville 1123
 SURFACE CHARACTERIZATION AND CONTAMINATION ANALYSIS
Period Obligations
 04/01/1994-02/28/1997 FY94: \$75,127 TOTAL: \$75,127
Prin. Invest. NASA Tech. Officer CASE Category
 G L WORKMAN MSFC/B H NERREN 41-Aero Engr
 B J SCHROER MSFC/D BURNS

NAG 8-1084 University of Alabama - Huntsville 1124
 ON WAVE PROCESSES IN THE SOLAR ATMOSPHERE
Period Obligations
 08/22/1994-08/21/1995 FY94: \$24,890 TOTAL: \$24,890
Prin. Invest. NASA Tech. Officer CASE Category
 Z E MUSIELAK MSFC/E J REICHMANN 11-Astronomy
 MSFC/J M DAVIS

NAG 8-1086 University of Alabama - Huntsville 1125
 TEACHING MIDDLE LEVEL SCIENCE AND TECH. FOR UNDER-
 STANDING
Period Obligations
 09/12/1994-09/11/1995 FY94: \$83,226 TOTAL: \$83,226
Prin. Invest. NASA Tech. Officer CASE Category
 A W LORBACK MSFC/W ANDERSON 29-Math/Computer, NEC
 B J POOLE

NAGW 9 University of Alabama - Huntsville 1126
 DYNAMICAL BEHAVIOR OF A FLARING LOOP
Period Obligations
 10/01/1979-03/31/1994 FY94: \$0 TOTAL: \$903,519
Prin. Invest. NASA Tech. Officer CASE Category
 S T WU HQ/H S AHLUWALIA 13-Physics
 HQ/S KANE

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NAGW 294 University of Alabama - Huntsville 1127
IMPULSIVE X RAY EMISSION IN SOLAR FLARES
Period Obligations
04/01/1982-06/30/1994 FY94: \$0 TOTAL: \$470,310
Pnn. Invest. NASA Tech. Officer CASE Category
A G EMSLIE HQ/H S AHLUWALIA 13-Physics
HQ/J D BOHLIN

NAGW 2739 University of Alabama - Huntsville 1135
CELLULAR RESPONSES TO LOW GRAVITY: PILOT STUDIES ON
SUBORBITAL ROCKETS AND ORBITING SPACECRAFT
Period Obligations
09/19/1991-09/30/1992 FY94: \$0 TOTAL: \$10,000
Pnn. Invest. NASA Tech. Officer CASE Category
M LEWIS HQ/T W HALSTEAD 51-Biological Sci

NAGW 812 University of Alabama - Huntsville 1128
MATERIAL PROCESSING
Period Obligations
09/15/1985-10/31/1994 FY94: \$1,570,161 TOTAL: \$29,851,641
Pnn. Invest. NASA Tech. Officer CASE Category
G R KARR HQ/R P WHITTEN 47-Materials Engr
C A LUNDQUIST HQ/A VILLAMIL

NAGW 2898 University of Alabama - Huntsville 1136
FAR ULTRAVIOLET NARROWLAND AND BROADBAND FILTERS,
POLARIZERS AND BEAMSPLITTERS FOR ASTROPHYSICS
Period Obligations
02/20/1992-12/31/1994 FY94: \$80,001 TOTAL: \$240,000
Pnn. Invest. NASA Tech. Officer CASE Category
M ZUKIC HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 996 University of Alabama - Huntsville 1129
A SIMPLE 3-D DYNAMICAL MODEL OF THERMAL PLASMA
Period Obligations
01/01/1987-06/30/1994 FY94: \$0 TOTAL: \$352,649
Pnn. Invest. NASA Tech. Officer CASE Category
P G RICHARDS HQ/M M MELLOTT 13-Physics
D G TORR HQ/T W PERRY

NAGW 2903 University of Alabama - Huntsville 1137
NAGW-2903/UNIV ALABAMA/IONOSPHERIC PLASMA OUTFLOW IN
RESPONSE TO TRANSVERSE ION HEATING
Period Obligations
08/02/1991-06/30/1995 FY94: \$32,997 TOTAL: \$120,481
Pnn. Invest. NASA Tech. Officer CASE Category
N SINGH HQ/J D BOHLIN 13-Physics

NAGW 1554 University of Alabama - Huntsville 1130
TIME-DEPENDENT POLAR PLASMA OUTFLOW
Period Obligations
12/07/1988-02/28/1995 FY94: \$75,930 TOTAL: \$418,548
Pnn. Invest. NASA Tech. Officer CASE Category
J L HORWITZ HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 2933 University of Alabama - Huntsville 1138
ON THE PHYSICAL PROCESSES UNDERLYING THE EXISTENCE AND
ORIGIN OF X-RAY AND MASS LOSS
Period Obligations
02/27/1992-12/31/1994 FY94: \$31,324 TOTAL: \$82,571
Pnn. Invest. NASA Tech. Officer CASE Category
Z E MUSIELAK HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 1630 University of Alabama - Huntsville 1131
EFFECTS OF PLASMASPHERE HEATING ON THERMAL ION
COMPOSITION
Period Obligations
02/22/1989-07/31/1995 FY94: \$24,999 TOTAL: \$319,741
Pnn. Invest. NASA Tech. Officer CASE Category
R H COMFORT HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 2971 University of Alabama - Huntsville 1139
THE OBSERVED CHARACTER OF FLARE ENERGY RELEASE
Period Obligations
03/11/1992-12/31/1992 FY94: \$0 TOTAL: \$51,694
Pnn. Invest. NASA Tech. Officer CASE Category
M MACHADO HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

NAGW 1651 University of Alabama - Huntsville 1132
DEVELOPMENT OF NEW METHODS FOR TRANSITION RADIATION
Period Obligations
02/03/1989-02/28/1995 FY94: \$60,000 TOTAL: \$388,185
Pnn. Invest. NASA Tech. Officer CASE Category
Y TAKAHASHI HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 3470 University of Alabama - Huntsville 1140
THE IONOSPHERE MAGNETOSPHERE TRANSITION REGION SIM
ULATION AND DATA COMPARISON
Period Obligations
04/09/1993-02/28/1996 FY94: \$68,569 TOTAL: \$134,614
Pnn. Invest. NASA Tech. Officer CASE Category
G R WILSON HQ/E C WHIPPLE 13-Physics
HQ/G L WITHBROE

NAGW 2023 University of Alabama - Huntsville 1133
A MEASUREMENT OF THE ENERGY SPECTRA OF COSMIC RAYS
FROM 20 TO 1000 GEV PER AMV
Period Obligations
08/08/1990-02/28/1995 FY94: \$85,000 TOTAL: \$660,598
Pnn. Invest. NASA Tech. Officer CASE Category
J C GREGORY HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 3540 University of Alabama - Huntsville 1141
NAGW-3540/UNIV ALABAMA/ AUTOMATED ANALYSIS OF ULTR A
HIGH ENERGY COSMIC RAY EVENTS
Period Obligations
04/21/1993-02/28/1996 FY94: \$89,899 TOTAL: \$174,899
Pnn. Invest. NASA Tech. Officer CASE Category
Y TAKAHASHI HQ/W V JONES 13-Physics
HQ/G L WITHBROE

NAGW 2128 University of Alabama - Huntsville 1134
A NEW APPROACH TO PLASMASPHERE REFILLING ANOMALOUS
PLASMA EFFECTS
Period Obligations
05/29/1990-07/31/1995 FY94: \$47,500 TOTAL: \$219,792
Pnn. Invest. NASA Tech. Officer CASE Category
N SINGH HQ/M M MELLOTT 13-Physics
HQ/T PERRY

NAGW 3617 University of Alabama - Huntsville 1142
THE OBSERVED CHARACTER OF FLARE ENERGY RELEASES
Period Obligations
05/26/1993-03/31/1995 FY94: \$55,193 TOTAL: \$109,132
Pnn. Invest. NASA Tech. Officer CASE Category
A G EMSLIE HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NAGW 3674 University of Alabama - Huntsville 1143
 INVESTIGATE THE IMPROVEMENT OF INTERUSABILITY FOR NASA EOS DATA
Period *Obligations*
 07/13/1993-04/30/1994 FY94: \$0 TOTAL: \$305,049
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M E BOTTS HQ/M E MAIDEN 39-Env Sci, NEC

NAGW 3692 University of Alabama - Huntsville 1144
 ANALYSIS OF THE IMAGING SPECTROMETRIC OBSERVATORY (ISO) DATA FROM THE ATLAS-1 MISSION
Period *Obligations*
 08/06/1993-07/31/1995 FY94: \$60,176 TOTAL: \$109,107
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D G TORR HQ/M M MELLOTT 13-Physics
 HQ/J D BOHLIN

NAGW 3979 University of Alabama - Huntsville 1145
 WAVE DRIVEN EXOTHERMIC HEATING IN THE MESOPAUSE REGION
Period *Obligations*
 05/13/1994-04/30/1997 FY94: \$74,394 TOTAL: \$74,394
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M P HICKEY HQ/M M MELLOTT 13-Physics
 HQ/J D BOHLIN

NAGW 4086 University of Alabama - Huntsville 1146
 1994 HUNTSVILLE WORKSHOP: COUPLING OF MICRO-AND MESOSCALE PROCESSES IN SPACE PLASMA TRANSPORT
Period *Obligations*
 07/22/1994-04/30/1995 FY94: \$5,000 TOTAL: \$5,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N SINGH HQ/E C WHIPPLE 13-Physics
 HQ/J D BOHLIN

NAS 1-19417 University of Alabama - Huntsville 1147
 ACCELERATION MEASUREMENT AND MANAGEMENT PROGRAM
Period *Obligations*
 09/03/1991-06/30/1993 FY94: \$0 TOTAL: \$44,402
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J A BIJVOET LARC/R L WRIGHT 41-Aero Engr
 C A LUNDQUIST LARC/J W JOHNSON

NAS 8-36718 University of Alabama - Huntsville 1148
 STUDY ENTITLED 'BASIC STUDIES IN THEORETICAL AND EXPERIMENTAL FLUID DYNAMICS STUDIES FOR SPACE FLIGHT
Period *Obligations*
 09/04/1986-07/31/1993 FY94: \$0 TOTAL: \$1,286,699
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R T MC NIDER MSFC/J W KAUFMAN 29-Math/Cmputer, NEC
 B J SCHROER MSFC/G H FICHTL

NAS 8-36955 University of Alabama - Huntsville 1149
 ESSENTIAL EDUCATIONAL ENGINEERING RESEARCH AND DEVELOPMENT CAPABILITY.
Period *Obligations*
 06/06/1988-08/07/1993 FY94: \$0 TOTAL: \$10,419,094
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W W VAUGHN MSFC/L J SMITH 99-Multi-Discip
 MSFC/M B ROBINSON

NAS 8-37106 University of Alabama - Huntsville 1150
 REFLIGHT OF IMAGING SPECTROMETRIC OBSERVATORY ON THE ATLAS I MISSION.
Period *Obligations*
 02/13/1987-06/30/1994 FY94: \$0 TOTAL: \$1,864,340
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D G TORR MSFC/J E JOHNSON 11-Astronomy
 MSFC/R ISE

NAS 8-37107 University of Alabama - Huntsville 1151
 STUDY ENTITLED 'RESEARCH ON ORBITAL PLASMA-ELECTRODYNAMICS.'
Period *Obligations*
 03/17/1987-09/30/1994 FY94: \$114,000 TOTAL: \$740,772
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N STON MSFC/J LAUE 31-Atmos Sci
 S T WU MSFC/R HOLDER
 N SINGH

NAS 8-38145 University of Alabama - Huntsville 1152
 PROVIDE OPTICAL FILTERAND MECHANICAL DESIGN
Period *Obligations*
 01/12/1990-09/30/1996 FY94: \$0 TOTAL: \$3,128,399
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M R TORR MSFC/G H FICHTAL 13-Physics
 D G TORR

NAS 8-38428 University of Alabama - Huntsville 1153
 EMULSION CHAMBER TECHNOLOGY EXPERIMENT
Period *Obligations*
 05/16/1990-05/07/1995 FY94: \$175,000 TOTAL: \$1,979,973
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J C GREGORY MSFC/J JOHNSON 42-Astro Engr
 MSFC/O GEORGE

NAS 8-38609 University of Alabama - Huntsville 1154
 ESSENTIAL ENGINEERING SERVICES, RESEARCH AND DEVELOPMENT CAPABILITY
Period *Obligations*
 04/24/1991-10/15/1994 FY94: \$2,700,144 TOTAL: \$7,394,495
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W W VAUGHAN MSFC/L J SMITH 99-Multi-Discip
 MSFC/D W HIPP

NAS 8-38663 University of Alabama - Huntsville 1155
 AN INFORMATION SYSTEM FOR EARTH SYSTEM SCIENCE
Period *Obligations*
 11/08/1991-11/07/1994 FY94: \$0 TOTAL: \$851,841
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S J GRAVES MSFC/R J KOCZOR 22-Computer Science
 R T MCNIDER

NAS 8-38773 University of Alabama - Huntsville 1156
 USML-1 GLOVERBOX EXPERIMENTS
Period *Obligations*
 11/01/1990-12/31/1994 FY94: \$0 TOTAL: \$166,506
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R J NAUMANN MSFC/R P CHASSAY 39-Env Sci, NEC

NAS 8-38776 University of Alabama - Huntsville 1157
 FIELD AND DATA ANALYSIS STUDIES RELATED TO THE ATMOSPHERIC ENVIRONMENT
Period *Obligations*
 02/21/1991-03/01/1994 FY94: \$0 TOTAL: \$953,522
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S Q KIDDER MSFC/J E ARNOLD 31-Atmos Sci
 R T MCNIDER

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NAS 8-38789 University of Alabama - Huntsville 1158
 MONITORING, ANALYZING AND MODELING THE GLOBAL EARTH SYSTEM
Period *Obligations*
 10/06/1991-08/31/1994 FY94: \$0 TOTAL: \$978,186
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S R CHRISTY MSFC/F LESLIE 31-Atmos Sci
 K T MCNIDER

NAS 8-39716 University of Alabama - Huntsville 1159
 RESEARCH STUDY
Period *Obligations*
 02/02/1993-02/31/1994 FY94: \$363,000 TOTAL: \$549,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F ROSENBERGER MSFC/L B JETER 19-Phys Sci, NEC

NAS 8-40185 University of Alabama - Huntsville 1160
 X-RAY TRANSMISSION MICROSCOPE DEVELOPMENT
Period *Obligations*
 02/07/1994-02/06/1995 FY94: \$74,958 TOTAL: \$74,958
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W F KAUKLER MSFC/P A CURRERI 19-Phys Sci, NEC

NAS 9-18403 University of Alabama - Huntsville 1161
 MEDICAL SUPPORT FOR MANNED ENVIRONMENTAL CONTROL LIFE SUPPORT SYSTEM TESTING
Period *Obligations*
 11/29/1990-01/04/1993 FY94: \$0 TOTAL: \$308,010
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W CRUMP JSC/R L SAUER 56-Medical Sciences

NCC 8-18 University of Alabama - Huntsville 1162
 COOPERATIVE APPROACH 6 MSFC TECHNICAL TRANSFER PROGRAM
Period *Obligations*
 06/11/1992-11/29/1993 FY94: \$0 TOTAL: \$443,694
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B J SCHROER MSFC/J R RICHARDSON 99-Multi-Discip
 W SOUDER MSFC/K FERNANDEZ

NCC 8-19 University of Alabama - Huntsville 1163
 MICROGRAVITY MATERIALS RESEARCH
Period *Obligations*
 11/04/1992-11/03/1995 FY94: \$320,863 TOTAL: \$395,863
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G WORKMAN MSFC/M B ROBINSON 47-Materials Engr
 MSFC/S L LEHOCZKY

NCC 8-21 University of Alabama - Huntsville 1164
 DATA AND INFORMATION SYSTEM
Period *Obligations*
 05/21/1993-05/24/1995 FY94: \$0 TOTAL: \$324,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S J GRAVES MSFC/H M GOODMAN 22-Computer Science
 H M GOODMAN

NCC 8-22 University of Alabama - Huntsville 1165
 GLOBAL CHANGE RESEARCH
Period *Obligations*
 09/01/1993-08/31/1995 FY94: \$2,942,177 TOTAL: \$4,861,754
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R LEE MSFC/J E ARNOLD 31-Atmos Sci
 O J PERKY
 R T MCNIDER

NCC 8-28 University of Alabama - Huntsville 1166
 STUDY VULNERABILITY OF SPACE STATION FREEDOM MODULES
Period *Obligations*
 09/07/1993-03/14/1995 FY94: \$53,961 TOTAL: \$308,961
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G R HOUGH MSFC/R E DOTSON 49-Engr, NEC
 MSFC/K B HAYASHIDA

NCC 8-38 University of Alabama - Huntsville 1167
 TEMPERATURE DISTRIBUTION OF VAPOR DEPOSITION STUDIES
Period *Obligations*
 05/09/1994-05/08/1995 FY94: \$20,677 TOTAL: \$20,677
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R J HUNG MSFC/D O FRAZIER 46-Mech Engr

NCCW 57 University of Alabama - Huntsville 1168
 EPSCOR PROGRAM
Period *Obligations*
 08/08/1994-05/31/1995 FY94: \$500,000 TOTAL: \$500,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J GREGORY HQ/A S MCCEE 99-Multi-Discip
 HQ/E T SCHWARTZ

NGT 00-040-010 University of Alabama - Huntsville 1169
 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
 09/28/1989-01/31/1995 FY94: \$409,000 TOTAL: \$1,898,790
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C A LUNDQUIST HQ/E T SCHWARTZ 99-Multi-Discip
 H WILSON

NGT 00-050-643 University of Alabama - Huntsville 1170
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 10/02/1990-09/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W P SCHONBERG HQ/F C OWENS 46-Mech Engr

NGT 00-050-679 University of Alabama - Huntsville 1171
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 09/10/1990-03/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S GRAVES HQ/F C OWENS 22-Computer Science

NGT 00-050-701 University of Alabama - Huntsville 1172
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 08/16/1991-08/31/1995 FY94: \$5,000 TOTAL: \$71,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 Z MUSIELAK HQ/F C OWENS 46-Mech Engr

NGT 00-050-753 University of Alabama - Huntsville 1173
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 07/02/1991-06/30/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J M HARRIS HQ/F C OWENS 12-Chemistry
 J M VAN ALSTINE

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NGT 00-050-866 University of Alabama - Huntsville 1174
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 01/29/1992-12/31/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
 A G EMSLIE MSFC/F SIX 13-Physics

NGT 00-050-881 University of Alabama - Huntsville 1175
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/05/1992-05/31/1994 FY94: \$0 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 J A GILBERT MSFC/F SIX 46-Mech Engr

NGT 00-051-031 University of Alabama - Huntsville 1176
 GRADUATE STUDENT RESEARCH PROGRAM
Period Obligations
 05/05/1993-05/31/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 R T MCNIDER GSFC/M BURRELL 13-Physics

NGT 00-051-121 University of Alabama - Huntsville 1177
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/09/1993-07/01/1993 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
 G A DUDLEY KSC/S GOLDSTEIN 56-Medical Sciences

NGT 00-051-299 University of Alabama - Huntsville 1178
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/06/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
 J L HORWITZ HQ/D HOLLAND 13-Physics

NGT 00-051-355 University of Alabama - Huntsville 1179
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/01/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
 J I ALEXANDER HQ/J LYNCH 13-Physics
 HQ/G A LESANE

NGT 00-070-159 University of Alabama - Huntsville 1180
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 09/26/1989-08/31/1993 FY94: \$0 TOTAL: \$84,000
Pnn. Invest. NASA Tech. Officer CASE Category
 G R KARR HQ/F C OWENS 46-Mech Engr

NGT 00-070-240 University of Alabama - Huntsville 1181
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 08/16/1991-12/31/1994 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
 G KARR MSFC/F S SIX 46-Mech Engr

NGT 00-070-366 University of Alabama - Huntsville 1182
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 09/10/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 R MCNIDER HQ/D K RUSSELL 21-Mathematics

NGT 00-070-368 University of Alabama - Huntsville 1183
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 12/03/1993-08/15/1995 FY94: \$44,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 P FARRINGTON HQ/D K RUSSELL 49-Engr, NEC

NGT 00-070-390 University of Alabama - Huntsville 1184
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 08/23/1994-06/30/1997 FY94: \$88,000 TOTAL: \$88,000
Pnn. Invest. NASA Tech. Officer CASE Category
 J C GREGORY HQ/D K RUSSELL 12-Chemistry

NGT 00-090-120 University of Alabama - Huntsville 1185
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
 09/25/1992-08/14/1993 FY94: TOTAL: \$7,702
Pnn. Invest. NASA Tech. Officer CASE Category
 J GIBSON HQ/D K RUSSELL 99-Multi-Discip

NGT 1-2099 University of Alabama - Huntsville 1186
 SUMMER FACULTY FELLOWSHIP PROGRAM
Period Obligations
 01/01/1978-03/31/1995 FY94: \$799,217 TOTAL: \$4,340,986
Pnn. Invest. NASA Tech. Officer CASE Category
 L M FREEMAN HQ/F C OWENS 49-Engr, NEC

NGT 1-8021 University of Alabama - Huntsville 1187
 A SUMMER FACULTY FELLOWSHIP PROGRAM
Period Obligations
 01/01/1976-03/31/1995 FY94: \$34,400 TOTAL: \$3,962,202
Pnn. Invest. NASA Tech. Officer CASE Category
 G R KARR HQ/A S MCGEE 49-Engr, NEC
 HQ/E T SCHWARTZ

NAG 3-1564 University of Alabama - University 1188
 GENETIC ALGORITHMS SOFTWARE DEVELOPMENT AND APPLIC
 ATION TO CONTROLLER PARTITIONING
Period Obligations
 01/14/1994-01/13/1995 FY94: \$39,929 TOTAL: \$39,929
Pnn. Invest. NASA Tech. Officer CASE Category
 K S KRISHNAKUMAR LERC/S GARG 41-Aero Engr

NAG 5-1643 University of Alabama - University 1189
 THE IRAS DATABASE AND THE IR PROPERTIES OF RINGED
 GALAXIES
Period Obligations
 06/17/1991-06/30/1993 FY94: \$0 TOTAL: \$31,683
Pnn. Invest. NASA Tech. Officer CASE Category
 R J BUTA GSFC/D WEST 11-Astronomy

NASA'S UNIVERSITY PROGRAM
ALABAMA (Continued)

NAG 5-1718 University of Alabama - University 1190
 SURFACE BRIGHTNESS PROFILES AND ENERGETICS OF INTRA-
 CLUSTER GAS IN COOL GALAXY CLUSTERS
Period Obligations
 08/13/1991-08/14/1994 FY94: \$0 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
 R E WHITE GSFC/R PETRE 11-Astronomy

NAG 5-1973 University of Alabama - University 1191
 SURFACE BRIGHTNESS PROFILES AND ENERGETICS OF INTE
 RCLUSTER GAS IN COOL GALAXY CLUSTERS
Period Obligations
 05/19/1992-05/31/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 R E WHITE GSFC/R PETRE 11-Astronomy

NAG 5-2134 University of Alabama - University 1192
 OBSCURATION AND AGE EFFECTS IN STARBURST NUCLEI
Period Obligations
 11/09/1992-03/31/1995 FY94: \$9,000 TOTAL: \$14,000
Prin. Invest. NASA Tech. Officer CASE Category
 W C KEEL GSFC/D WEST 11-Astronomy

NAG 5-2402 University of Alabama - University 1193
 THE TEMPERATURE, ABUNDANCE, ABSORPTION, AND DARK M
 ATTER DISTRIBUTION IN CLUSTERS OF GALAXIES
Period Obligations
 10/22/1993-10/31/1995 FY94: \$30,260 TOTAL: \$30,260
Prin. Invest. NASA Tech. Officer CASE Category
 M J HENRIKSEN GSFC/D WEST 11-Astronomy

NAG 5-2529 University of Alabama - University 1194
 COOLING FLOWS IN THE CONTEXT OF HIERARCHICAL CLUS
 TERING: AN HRI STUDY OF PREMERGER SYSTEMS
Period Obligations
 02/21/1994-03/14/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
 M J HENRIKSEN GSFC/R PETRE 11-Astronomy

NAG 5-2574 University of Alabama - University 1195
 ABUNDANCE GRADIENTS IN INTRACLUSTER GAS
Period Obligations
 04/12/1994-10/14/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
 R E WHITE III GSFC/N WHITE 11-Astronomy

NAG 5-2703 University of Alabama - University 1196
 ISM - IGM INTERACTIONS AND SPIRAL DISKS
Period Obligations
 08/24/1994-02/29/1996 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
 W KEEL GSFC/R PETRE 11-Astronomy

NAG 8-154 University of Alabama - University 1197
 MECHANICAL ENGINEERING DESIGN PROBLEMS
Period Obligations
 03/12/1990-03/18/1993 FY94: TOTAL: \$14,932
Prin. Invest. NASA Tech. Officer CASE Category
 C B EVCES MSFC/K S TYGIELSKI 46-Mech Engr

NAG 8-228 University of Alabama - University 1198
 COOLING FLOW SPECTRAIN GINGA GALAXY CLUSTERS
Period Obligations
 03/16/1992-03/14/1995 FY94: \$0 TOTAL: \$37,200
Prin. Invest. NASA Tech. Officer CASE Category
 R E WHITE MSFC/J VARGUS 11-Astronomy

NAG 8-240 University of Alabama - University 1199
 ELECTROMECHANICAL ACTUATORS FOR DEEP SPACE MISSION
Period Obligations
 07/01/1992-08/15/1995 FY94: \$75,248 TOTAL: \$228,737
Prin. Invest. NASA Tech. Officer CASE Category
 T HASKEW MSFC/R A WEIR 49-Engr, NEC
 J WANDER MSFC/M S HAMMOND

NAG 8-279 University of Alabama - University 1200
 RESEARCH STUDY
Period Obligations
 01/14/1993-02/28/1995 FY94: \$56,739 TOTAL: \$106,789
Prin. Invest. NASA Tech. Officer CASE Category
 K W WHITAKER MSFC/W T POWERS 13-Physics
 K S KRISHNAKUMAR MSFC/A E COOPER

NAG 8-813 University of Alabama - University 1201
 MECAHANICAL ENGINEERING DESIGN PROBLEMS
Period Obligations
 03/16/1990-12/31/1992 FY94: TOTAL: \$8,801
Prin. Invest. NASA Tech. Officer CASE Category
 C R EVCES MSFC/C COLLEY 46-Mech Engr

NAG 8-901 University of Alabama - University 1202
 ALTERNATE VEHICLES FOR ENGINE/VEHICLE OPTIMIZATOR
Period Obligations
 01/13/1992-08/15/1993 FY94: TOTAL: \$24,928
Prin. Invest. NASA Tech. Officer CASE Category
 J A MARTIN MSFC/R M NIXON 42-Astro Engr

NAG 8-988 University of Alabama - University 1203
 PRESSURE RESEARCH
Period Obligations
 10/22/1993-09/15/1994 FY94: \$23,200 TOTAL: \$23,200
Prin. Invest. NASA Tech. Officer CASE Category
 R W WHITAKER MSFC/J VARGOS 46-Mech Engr

NAG 8-1025 University of Alabama - University 1204
 AN INVESTIGATION OF FOREE FEEDBACK FOR TVX ELETRO-
 MECHANICAL ACTUATORS
Period Obligations
 02/09/1994-12/31/1994 FY94: \$41,790 TOTAL: \$41,790
Prin. Invest. NASA Tech. Officer CASE Category
 J PARKER MSFC/J VARGAS 46-Mech Engr

NAG 8-1026 University of Alabama - University 1205
 TRIPROPELLANT TEAM ACTIVITY
Period Obligations
 01/19/1994-11/01/1994 FY94: \$1,510 TOTAL: \$1,510
Prin. Invest. NASA Tech. Officer CASE Category
 J A MARTIN MSFC/R F NIXON 41-Aero Engr

NAG 8-1045 University of Alabama - University 1206
 STAGEWEIGHT ESTIMATING PROGRAM
Period Obligations
 02/03/1994-10/15/1994 FY94: \$4,934 TOTAL: \$4,934
Prin. Invest. NASA Tech. Officer CASE Category
 J A MARTIN MSFC/N S BROWN 41-Aero Engr

NASA'S UNIVERSITY PROGRAM **ALABAMA (Continued)**

NAG 8-1059 University of Alabama - University 1207
ASSESSMENT OF IMPACT DAMAGE IN 18' DIAMETER FILA- MENT
WOUND COMPOSITE PRESSURE BOTTLES
Period *Obligations*
06/14/1994-08/31/1995 FY94: \$43,409 TOTAL: \$43,409
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L HIGHSMITH MSFC/F E LEDBETTER 46-Mech Engr
MSFC/A T NETTLES

NAG 9-625 University of Alabama - University 1208
AUTOMATING THE APPL OF GENETIC ALGORITHMS
Period *Obligations*
08/18/1992-05/31/1994 FY94: \$0 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E SMITH JSC/L WANG 51-Biological Sci

NAGW 3072 University of Alabama - University 1209
DEVELOPING SCIENTIFIC LITERACY THROUGH AEROSPACE
EDUCATION
Period *Obligations*
05/15/1992-08/15/1994 FY94: \$0 TOTAL: \$84,346
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D W SUNAI HQ/D GALLAWAY 99-Multi-Discip
K W WHITAKER
L M FREEMAN

NAGW 3785 University of Alabama - University 1210
THEORETICAL CALCULATION OF THE CONTINUOUS FAR-WING
Period *Obligations*
09/29/1993-08/14/1995 FY94: \$103,000 TOTAL: \$103,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H TIPPING HQ/J T BERGSTRALH 31-Atmos Sci

NAS 8-39715 University of Alabama - University 1211
PARTICLE INGULFMENT AND PUSHING BY SOLIDFYING INTE
RFACES
Period *Obligations*
02/17/1993-02/16/1996 FY94: \$196,853 TOTAL: \$260,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M STEFANESCU MSFC/I C YATES 19-Phys Sci, NEC
P A CURRERI
B K DHINDAW

NCC 8-23 University of Alabama - University 1212
A STUDY OF THE USE OF CONTACT LOADING TO SIMULATE LOW
VELOCITY
Period *Obligations*
05/12/1993-05/11/1994 FY94: \$0 TOTAL: \$29,892
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L HIGHSMITH MSFC/F E LEDBETTER III 47-Materials Engr
MSFC/W J PATTERSON

NCC 8-34 University of Alabama - University 1213
SOLIDIFICATION PROCESSING TECH
Period *Obligations*
02/25/1994-02/28/1995 FY94: \$15,225 TOTAL: \$15,225
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M STEFANESCU MSFC/P A CURRERI 19-Phys Sci, NEC

NCC 8-57 University of Alabama - University 1214
MICRO AND MACRO SEGREGATION IN ALLOYS SOLIDIFYING WITH
EQUIAXED MORPHOLOGY
Period *Obligations*
08/19/1994-08/18/1995 FY94: \$43,796 TOTAL: \$43,796
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M STEFANESCU MSFC/P A CURRERERI 47-Materials Engr
L NASTAC MSFC/R P SILVER

NGT 00-051-245 University of Alabama - University 1215
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/31/1994-08/14/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A KATZ LARC/L EVANS 41-Aero Engr

NGT 00-070-302 University of Alabama - University 1216
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
11/16/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L T WORTZ HQ/F SIX 46-Mech Engr

NGT 00-070-303 University of Alabama - University 1217
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
10/26/1992-08/15/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G BATSON HQ/D K RUSSELL 47-Materials Engr

NGT 00-070-379 University of Alabama - University 1218
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/22/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J K PARKER HQ/D K RUSSELL 46-Mech Engr

NGT 00-090-224 University of Alabama - University 1219
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period *Obligations*
09/14/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G SINGLETON HQ/D K RUSSELL 99-Multi-Discip

NAG 8-278 University of South Alabama 1220
RESEARCH STUDY
Period *Obligations*
12/17/1992-05/31/1995 FY94: \$48,499 TOTAL: \$107,499
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E SPALL MSFC/F SIX 19-Phys Sci, NEC
H A OMAR

ALASKA

NAG 5-2074 University of Alaska - Anchorage 1221
ANALYSIS OF ALASKAN ARCTIC LAKES
Period *Obligations*
09/01/1992-08/31/1994 FY94: \$0 TOTAL: \$16,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K M PETERSON GSFC/D K HALL 39-Env Sci, NEC

NCCW 42 University of Alaska - Anchorage 1222
ALASKA TECHNOLOGY TRANSFER ASSISTANCE CENTER
Period *Obligations*
06/28/1994-06/30/1996 FY94: \$319,340 TOTAL: \$319,340
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J FREDERICKS HQ/J ROOT 99-Multi-Discip

**NASA'S UNIVERSITY PROGRAM
ALASKA (Continued)**

NAG 5-693 University of Alaska - Fairbanks 1223
CO-INVEST. PROPOSAL FOR CORNELL UNIV SOUNDING OF THE
CLEFT ION FOUNTAIN ENERGIZATION REGION (SCIFER)
Period Obligations
05/26/1992-02/28/1995 FY94: \$49,148 TOTAL: \$78,744
Prin. Invest. NASA Tech. Officer CASE Category
C S DEEHR GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-699 University of Alaska - Fairbanks 1224
FACILITIES AND RESEARCH INSTRUMENTATION DEVELOPMENT AT
THE POKER FLAT RESEARCH RANGE
Period Obligations
04/14/1993-09/30/1995 FY94: \$578,500 TOTAL: \$7,543,500
Prin. Invest. NASA Tech. Officer CASE Category
S A KASOFU GSFC/B J FLOWERS 31-Atmos Sci
GSFC/M J ELLIS

NAG 5-887 University of Alaska - Fairbanks 1225
MEASUREMENTS ON THE SNOW OF INTERIOR AND ARCTIC
ALASKA
Period Obligations
04/01/1987-07/31/1994 FY94: \$0 TOTAL: \$91,555
Prin. Invest. NASA Tech. Officer CASE Category
C S BENSON GSFC/D K HALL 19-Phys Sci, NEC
GSFC/J L FOSTER

NAG 5-1097 University of Alaska - Fairbanks 1226
ATMOSPHERE IONOSPHERE MAGNETOSPHERE SYSTEM
Period Obligations
11/01/1988-03/31/1995 FY94: \$150,000 TOTAL: \$865,000
Prin. Invest. NASA Tech. Officer CASE Category
M H REES GSFC/S A CURTIS 13-Physics
GSFC/M H ACUNA

NAG 5-1504 University of Alaska - Fairbanks 1227
A STUDY OF SOLAR WIND-MAGNETOSPHERE INTERACTION AT THE
DAYSIDE AND NIGHTSIDE MAGNETOPAUSE
Period Obligations
03/19/1991-11/30/1994 FY94: \$259,990 TOTAL: \$839,990
Prin. Invest. NASA Tech. Officer CASE Category
L C LEE GSFC/T J BIRMINGHAM 13-Physics

NAG 5-1731 University of Alaska - Fairbanks 1228
A STUDY OF PHYSICAL STRUCTURAL FACTORS AFFECTING THE
SAR SIGNATURES OF ICE-COVERED ARCTIC AND SUB-AR
Period Obligations
08/01/1991-07/31/1994 FY94: \$0 TOTAL: \$154,105
Prin. Invest. NASA Tech. Officer CASE Category
M O. JEFFRIES GSFC/D K HALL 39-Env Sci, NEC
W F WEEKS

NAG 5-1915 University of Alaska - Fairbanks 1229
ANALYSIS OF AURORAL IMAGES IN THE DYNAMIC EXPLORER
PROGRAM
Period Obligations
02/26/1992-02/28/1994 FY94: \$0 TOTAL: \$88,764
Prin. Invest. NASA Tech. Officer CASE Category
J D CRAVEN GSFC/G D BULLOCK 13-Physics
GSFC/R A HOFFMAN

NAG 5-2249 University of Alaska - Fairbanks 1230
ANALYSIS OF DE-1 PWI ELECTRIC FIELD DATA
Period Obligations
04/30/1993-04/30/1994 FY94: \$0 TOTAL: \$14,802
Prin. Invest. NASA Tech. Officer CASE Category
D WEIMER GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-5000 University of Alaska - Fairbanks 1231
SHAPED CHARGE INJECTION OF FIELD ALIGNED BA AND CA
PLASMA TO INVESTIGATE THE PHYSICS OF MASSED VEPE
Period Obligations
03/29/1993-01/14/1995 FY94: \$196,027 TOTAL: \$278,783
Prin. Invest. NASA Tech. Officer CASE Category
E WESCOTT GSFC/L J EARLY 13-Physics
GSFC/P H PLESS

NAG 5-5012 University of Alaska - Fairbanks 1232
OPTICAL IMAGING OF CLOUD-TO-STRATOSPHERE/MEMO- SPHERE
LIGHTNING OVER THE AMAZON BASIN (CS/LAB)
Period Obligations
05/14/1993-05/31/1994 FY94: \$5,000 TOTAL: \$130,998
Prin. Invest. NASA Tech. Officer CASE Category
D D SENTMAN GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-5013 University of Alaska - Fairbanks 1233
MICRO-SCALE AURORAL IMAGING TO COMPLIMENT THE AURORAL
MICROPHYSICS ROCKET EXPERIMENT
Period Obligations
05/19/1993-12/31/1994 FY94: \$5,062 TOTAL: \$10,062
Prin. Invest. NASA Tech. Officer CASE Category
T J HALLINAN GSFC/L J EARLY 11-Astronomy
GSFC/R H PLESS

NAG 5-5019 University of Alaska - Fairbanks 1234
VIDEO-IMAGING OF IONOSPHERIC-UPPER ATMOSPHERIC OPTICAL
FLASHES FROM AIRCRAFT
Period Obligations
03/10/1994-03/30/1995 FY94: \$421,335 TOTAL: \$421,335
Prin. Invest. NASA Tech. Officer CASE Category
D D SENTMAN GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 6-1 University of Alaska - Fairbanks 1235
FLUORESCENT PLASMA TRACER AND PERTURBATION
EXPERIMENTS FROM SOUNDING ROCKETS
Period Obligations
01/01/1980-01/31/1994 FY94: \$0 TOTAL: \$2,109,549
Prin. Invest. NASA Tech. Officer CASE Category
E M WESCOTT GSFC/L J EARLY 19-Phys Sci, NEC
GSFC/R H PLESS

NAGW 1342 University of Alaska - Fairbanks 1236
DEVELOPMENT SOLAR-TERRESTRIAL RES. PRG. FOR NINETIES
Period Obligations
06/27/1988-12/31/1993 FY94: \$0 TOTAL: \$181,665
Prin. Invest. NASA Tech. Officer CASE Category
J G ROEDERER HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 2165 University of Alaska - Fairbanks 1237
IMPACT OF STRATOSPHERIC AEROSOLS AND TROPOSPHERIC
CLOUDS OF STRATOSPHERIC PHOTODISSOCIATION HEATING
Period Obligations
06/20/1990-03/31/1996 FY94: \$85,000 TOTAL: \$327,957
Prin. Invest. NASA Tech. Officer CASE Category
K STAMNES HQ/R D MCPETERS 31-Atmos Sci
HQ/M J PRATHER

NASA'S UNIVERSITY PROGRAM
ALASKA (Continued)

NAGW 2517 University of Alaska - Fairbanks 1238
 APPLICATION OF SAR AND AVHRR IMAGERY TO POLYMYAS OF THE BERING AND CHUKCHI SEAS
Period *Obligations*
 05/23/1991-06/30/1993 FY94: \$0 TOTAL: \$237,074
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T J WEINGARTNER HQ/R H THOMAS 33-Oceanography

NAGW 2519 University of Alaska - Fairbanks 1239
 UTILIZATION OF SAR DATA IN ARCTIC HYDROLOGY MODELING
Period *Obligations*
 07/25/1991-07/31/1994 FY94: \$0 TOTAL: \$334,490
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D L KANE HQ/R H THOMAS 39-Env Sci, NEC

NAGW 2614 University of Alaska - Fairbanks 1240
 SATELLITE RADAR ALTIMETRY AND ICE SHEET DYNAMICS
Period *Obligations*
 07/31/1991-06/30/1994 FY94: \$0 TOTAL: \$253,665
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C LINGLE HQ/R H THOMAS 39-Env Sci, NEC
 HQ/R A SCHIFFER

NAGW 2637 University of Alaska - Fairbanks 1241
 THE SEA ICE CIRCULATION OF THE BERING SEA FROM ERS-1 SYNTHETIC APERTURE RADAR IMAGERY
Period *Obligations*
 07/15/1991-06/30/1994 FY94: \$0 TOTAL: \$175,290
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 H J NIEBAUER HQ/R H THOMAS 33-Oceanography

NAGW 2716 University of Alaska - Fairbanks 1242
 NAGW-2716/UNIV ALASKA INTERACTION BETWEEN ICE DEFORMATION, ICE THICKNESS DISTRIBUTIONS, ICE PROPERTIES
Period *Obligations*
 09/25/1991-09/30/1995 FY94: \$113,306 TOTAL: \$314,454
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W WEEKS HQ/R A SCHIFFER 39-Env Sci, NEC
 S LI HQ/D M BUTLER

NAGW 2735 University of Alaska - Fairbanks 1243
 AN INVESTIGATION OF THE THETA AURORA
Period *Obligations*
 09/19/1991-03/31/1993 FY94: \$0 TOTAL: \$50,740
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J D CRAVEN HQ/M M MELLOTT 11-Astronomy
 HQ/J D BOHLIN

NAGW 2827 University of Alaska - Fairbanks 1244
 SAR INVESTIGATIONS OF GLACIERS IN NORTHWESTERN NORTH AMERICA
Period *Obligations*
 01/03/1992-11/30/1994 FY94: \$77,092 TOTAL: \$234,253
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C S LINGLE HQ/R A SCHIFFER 39-Env Sci, NEC
 HQ/D M BUTLER

NAGW 2829 University of Alaska - Fairbanks 1245
 AN ARCTIC MODELING CENTER ON OCEAN ICE ATMOSPHERE INTERACTIONS
Period *Obligations*
 01/03/1992-12/31/1994 FY94: \$215,000 TOTAL: \$579,650
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G WELLER HQ/R A SCHIFFER 39-Env Sci, NEC
 HQ/D M BUTLER

NAGW 2857 University of Alaska - Fairbanks 1246
 3-DIMENSIONAL MORPHOLOGY OF AURORAS BASED ON TRIANGULATION FROM THE SPACE SHUTTLE
Period *Obligations*
 01/31/1992-03/31/1995 FY94: \$60,463 TOTAL: \$177,325
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T J HALINAN HQ/D L REASONER 13-Physics
 HQ/J D BOHLIN

NAGW 2972 University of Alaska - Fairbanks 1247
 INVESTIGATION OF THE ICE-TIDE INTERACTION IN THE ARCTIC OCEAN
Period *Obligations*
 03/20/1992-12/31/1994 FY94: \$110,684 TOTAL: \$321,063
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 Z KOWALIK HQ/R A SCHIFFER 33-Oceanography
 HQ/D M BUTLER

NAGW 3037 University of Alaska - Fairbanks 1248
 COMPOSITION AND TEMPERATURES OF THE AURORAL IONOSPHERE
Period *Obligations*
 05/15/1992-03/31/1995 FY94: \$20,000 TOTAL: \$100,081
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D LUMMERZHEIM HQ/D L REASONER 13-Physics
 HQ/J D BOHLIN

NAGW 3436 University of Alaska - Fairbanks 1249
 MODEL AURORAL ELECTRON PRECIPITATION PATTERNS FOR COUPLED THERMO. ION. SIM
Period *Obligations*
 03/10/1993-03/31/1996 FY94: \$50,401 TOTAL: \$100,111
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J D CRAVEN HQ/M M MELLOTT 13-Physics
 HQ/G L WITHBROE

NAGW 3441 University of Alaska - Fairbanks 1250
 ASYMMETRIC DEVELOPMENT OF THE AURORAL BULGE DURING SUBSTORM EXPANSION
Period *Obligations*
 03/10/1993-02/28/1996 FY94: \$48,000 TOTAL: \$94,907
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J D CRAVEN HQ/E C WHIPPLE 13-Physics
 HQ/G L WITHBROE

NAGW 3663 University of Alaska - Fairbanks 1251
 SYMPOSIUM SUPPORT: SECOND INTERNATIONAL CONFERENCE ON SUBSTORMS
Period *Obligations*
 06/18/1993-03/31/1994 FY94: \$0 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S AKASOFU HQ/E C WHIPPLE 13-Physics
 HQ/J D BOHLIN

NAGW 3727 University of Alaska - Fairbanks 1252
 ELEVATION CHANGES OF MOUNTAIN GLACIERS AS MEASURED BY AIRBORNE LASER ALTIMETRY
Period *Obligations*
 09/10/1993-08/31/1996 FY94: \$0 TOTAL: \$128,129
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W D HARRISON HQ/R H THOMAS 39-Env Sci, NEC
 K A ECHELMAYER HQ/R A SCHIFFER

NASA'S UNIVERSITY PROGRAM ALASKA (Continued)

NAGW 3728 University of Alaska - Fairbanks 1253
EXPERIMENTAL STUDY OF PHYSICAL AND CHEMICAL PROPERTIES
OF CLOUD CONDENSATION NUCLEI
Period *Obligations*
09/03/1993-06/30/1996 FY94: \$158,642 TOTAL: \$232,202
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G E SHAW HQ/J T SUTTERS 31-Atmos Sci
R L BENNER HQ/A C JANETOS

NAGW 4048 University of Alaska - Fairbanks 1254
FAST CONJUGATE AIRCRAFT OBSERVATIONS
Period *Obligations*
07/15/1994-06/30/1995 FY94: \$342,037 TOTAL: \$342,037
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H C HQ/R HOWARD 13-Physics
STENBAEK-NIELSEN HQ/J D BOHLIN

NAS 3-26401 University of Alaska - Fairbanks 1255
ACTS PROPAGATION EXPERIMENTS IN ALASKA
Period *Obligations*
05/24/1993-08/24/1995 FY94: \$64,999 TOTAL: \$274,529
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C E MAYER LERC/R J GUNDERMAN 19-Phys Sci, NEC

NAS 5-31637 University of Alaska - Fairbanks 1256
OPERATIONS AND MAINTENANCE OF POKER FLAT RESEARCH
RANGE
Period *Obligations*
11/01/1989-10/31/1994 FY94: \$3,824,577 TOTAL: \$18,366,662
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C DEEHR GSFC/W A BRENCE 31-Atmos Sci
GSFC/C F MILLINER

NAS 5-32393 University of Alaska - Fairbanks 1257
OPERATION AND MANAGEMENT OF ALASKA SYNTHETIC APERTURE
RADAR FACILITY
Period *Obligations*
04/01/1993-04/01/1998 FY94: \$4,066,000 TOTAL: \$8,460,800
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G WELLER GSFC/G HUNOLT 39-Env Sci, NEC

NAS 8-36321 University of Alaska - Fairbanks 1258
FROM CRESS
Period *Obligations*
04/12/1985-12/31/1993 FY94: \$0 TOTAL: \$1,495,560
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E M WESCOTT MSFC/T T LITTLE 31-Atmos Sci

NCA 2-672 University of Alaska - Fairbanks 1259
THERMAL AND HYDROLOGIC DYNAMICS OF AND ARCTIC WETL
AND PRELIMINARY INVESTIGATION
Period *Obligations*
11/07/1991-11/14/1992 FY94: \$0 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L D HINZMAN ARC/D PETERSON 32-Geological Sci

NCA 5-112 University of Alaska - Fairbanks 1260
PROCESSING SYNTHETIC APERTURE RADAR DATA
Period *Obligations*
04/27/1988-02/28/1995 FY94: \$2,012,407 TOTAL: \$12,762,487
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J MILLER GSFC/G H TROFFORD 11-Astronomy
W F WEEKS
G WELLER

NCC 5-75 University of Alaska - Fairbanks 1261
MODIS/SNOW MAPPING: IN-SITU MEASUREMENTS ON THE SNOW
OF INTERIOR AND ARCTIC ALASKA
Period *Obligations*
07/11/1994-07/31/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C BENSON GSFC/D HALL 39-Env Sci, NEC

NGT 00-030-039 University of Alaska - Fairbanks 1262
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/23/1991-02/28/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E BREITENBERGER HQ/D M BUTLER 39-Env Sci, NEC
G WENDLER HQ/G S WILSON

NGT 00-030-088 University of Alaska - Fairbanks 1263
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/06/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W MASLOWSKI HQ/D M BUTLER 33-Oceanography
Z KOWALIK HQ/G S WILSON

NGT 00-040-022 University of Alaska - Fairbanks 1264
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
03/29/1991-02/28/1994 FY94: \$170,000 TOTAL: \$663,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J G HAWKINS HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-599 University of Alaska - Fairbanks 1265
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/27/1990-02/28/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H J NIEBAUER HQ/F C OWENS 33-Oceanography

ARIZONA

NAG 1-562 Arizona State University 1266
ELECTROMAGNETIC BACKSCATTERING BY CORNER REFLECTORS
Period *Obligations*
01/22/1985-01/31/1995 FY94: \$0 TOTAL: \$359,853
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C A BALANIS LARC/M C GILREATH 45-Elec Engr

NAG 1-937 Arizona State University 1267
TRANSITION STUDIES ON A SWEEP-WING MODEL
Period *Obligations*
01/09/1989-05/15/1994 FY94: \$0 TOTAL: \$625,495
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W S SARIC LARC/J R DAGENHART 41-Aero Engr

NAG 1-1080 Arizona State University 1268
NEAR-WALL MODELLING OF COMPRESSIBLE TURBULENT FLOW
Period *Obligations*
12/22/1989-04/30/1993 FY94: \$1 TOTAL: \$204,474
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R SO LARC/T B GATSKI 41-Aero Engr

NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)

NAG 1-1082 Arizona State University 1269
 ADVANCED ELECTROMAGNETIC METHODS FOR AEROSPACE
 VEHICLES
Period Obligations
 12/15/1989-06/30/1994 FY94: \$100,000 TOTAL: \$400,000
Prin. Invest. NASA Tech. Officer CASE Category
 C A BALANIS LARC/G C BARBER 45-Elec Engr
 LARC/T G CAMPBELL

NAG 1-1111 Arizona State University 1270
 CONTROL OF UNSTABLE WAVES IN THREE-DIMENSIONAL
 BOUNDARY LAYERS
Period Obligations
 03/01/1990-05/15/1995 FY94: \$26,000 TOTAL: \$227,996
Prin. Invest. NASA Tech. Officer CASE Category
 W S SARIC LARC/D M BUSHNELL 41-Aero Engr

NAG 1-1158 Arizona State University 1271
 NUMERICAL SIMULATION OF SWEEP-WING FLOWS.
Period Obligations
 07/09/1990-08/04/1995 FY94: \$35,000 TOTAL: \$185,000
Prin. Invest. NASA Tech. Officer CASE Category
 H L REED LARC/C L STRETT 41-Aero Engr
 LARC/A KUMAR

NAG 1-1183 Arizona State University 1272
 ANTENNA PATTERN CONTROL USING IMPEDENCE SURFACES
Period Obligations
 09/13/1990-09/15/1993 FY94: \$0 TOTAL: \$42,689
Prin. Invest. NASA Tech. Officer CASE Category
 C A BALANIS LARC/G C BARBER 45-Elec Engr

NAG 1-1341 Arizona State University 1273
 DYNAMICS AND CONTROL OF HYPERSONIC VEHICLES
 INCREMENTAL FUNDING THROUGH DECEMBER 31, 1991
Period Obligations
 09/17/1991-12/31/1993 FY94: \$1 TOTAL: \$167,426
Prin. Invest. NASA Tech. Officer CASE Category
 D K SCHMIDT LARC/I M GREGORY 41-Aero Engr

NAG 1-1399 Arizona State University 1274
 A CONFERENCE ON NEAR-WALL TURBULANCE AND FLOWS
Period Obligations
 03/04/1992-06/30/1994 FY94: \$0 TOTAL: \$43,750
Prin. Invest. NASA Tech. Officer CASE Category
 R M SO LARC/T B GATSKI 41-Aero Engr
 B E LAUNDER
 C G SPEZIALE

NAG 1-1630 Arizona State University 1275
 HYBRID CEM TECHNIQUES FOR ADVANCED ANTENNA RADIATION
 PREDICTION CODES
Period Obligations
 06/07/1994-06/06/1995 FY94: \$50,187 TOTAL: \$50,187
Prin. Invest. NASA Tech. Officer CASE Category
 J T ABERLE LARC/D G SHIVELY 45-Elec Engr
 C BALANIS LARC/F B BECK

NAG 2-771 Arizona State University 1276
 OPTIMUM DESIGN OF HIGH-SPEED PROP-ROTORS
Period Obligations
 03/26/1992-06/30/1995 FY94: \$28,000 TOTAL: \$57,996
Prin. Invest. NASA Tech. Officer CASE Category
 A CHATTOPADHYAY ARC/S KOTTAPALLI 41-Aero Engr
 ARC/J J TOTAH

NAG 2-844 Arizona State University 1277
 AERODYNAMIC REQUIREMENTS FOR BVI NOISE CONTROL
Period Obligations
 06/10/1993-05/14/1994 FY94: \$0 TOTAL: \$39,533
Prin. Invest. NASA Tech. Officer CASE Category
 V WELLS ARC/Y H YU 41-Aero Engr
 ARC/J M GALLMAN

NAG 2-882 Arizona State University 1278
 GENETIC ALGORITHMS IN CONCEPTUAL DESIGN OF A LIGHT
 -WEIGHT, LOW NOISE, TILT-ROTOR AIRCRAFT
Period Obligations
 02/15/1994-12/31/1994 FY94: \$74,672 TOTAL: \$74,672
Prin. Invest. NASA Tech. Officer CASE Category
 V WELLS ARC/T L GALLOWAY 41-Aero Engr
 D LAANANEN ARC/J D PHILLIPS

NAG 2-908 Arizona State University 1279
 DEVELOPMENT OF A COMPOSITE TAILORING PROCEDURE FOR
 AIRPLANE WING
Period Obligations
 06/15/1994-09/30/1994 FY94: \$20,149 TOTAL: \$20,149
Prin. Invest. NASA Tech. Officer CASE Category
 A CHATTOPADHYAY ARC/H MIURA 41-Aero Engr
 ARC/A SHAHN

NAG 2-918 Arizona State University 1280
 PROP ROTOR ACOUSTICS FOR CONCEPTUAL DESIGN
Period Obligations
 07/15/1994-12/31/1994 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
 V L WELLS ARC/P D TALBOT 41-Aero Engr
 ARC/K F STUDEBAKER

NAG 3-998 Arizona State University 1281
 COOPERATIVE CONTROL THEORY WITH APPLICATION TO FLI
 GHT/PROPULSION CONTROL
Period Obligations
 02/16/1989-02/07/1994 FY94: TOTAL: \$209,999
Prin. Invest. NASA Tech. Officer CASE Category
 D K SCHMIDT LERC/R E BULLARD 41-Aero Engr

NAG 3-1139 Arizona State University 1282
 THE DEVELOPMENT OF AN ADVANCED HIGH-FREQUENCY PART
 IAL DISCHARGE MEASURING SYSTEM CONCEPTS
Period Obligations
 02/23/1990-02/20/1994 FY94: \$0 TOTAL: \$54,548
Prin. Invest. NASA Tech. Officer CASE Category
 G G KARADY LERC/G R SUNDBERG 45-Elec Engr
 M D SIRKIS LERC/S DOMITZ

NAG 5-481 Arizona State University 1283
 ULTRAVIOLET OBSERVATIONS OF GALACTEC VOVOE IN
 OUTBURST
Period Obligations
 10/01/1984-01/31/1995 FY94: \$14,230 TOTAL: \$209,579
Prin. Invest. NASA Tech. Officer CASE Category
 S G STARRFIELD GSFC/D K WEST 11-Astronomy
 S KENYON
 G FERLAND

NASA'S UNIVERSITY PROGRAM **ARIZONA (Continued)**

NAG 5-547 Arizona State University 1284
 K GIANT SPECTRA FOR STELLAR POPULATION MODELS
Period Obligations
 06/01/1985-09/30/1993 FY94: \$0 TOTAL: \$105,909
Prin. Invest. NASA Tech. Officer CASE Category
 D BURSTEIN GSFC/Y KONDO 11-Astronomy
 C C WU
 R W O'CONNELL

NAG 5-996 Arizona State University 1285
 THE PRECESSING ACCRETION DISK IN THE BLACK-HOLE BI NARY LMC X-3
Period Obligations
 09/01/1987-01/31/1995 FY94: \$30,980 TOTAL: \$112,955
Prin. Invest. NASA Tech. Officer CASE Category
 A P COWLEY GSFC/D K WEST 11-Astronomy
 F D HARTWICK

NAG 5-1743 Arizona State University 1286
 UV EXTENSION AND IR EMISSION IN DIFFUSE HII REGIONS
Period Obligations
 08/15/1991-08/14/1993 FY94: \$0 TOTAL: \$46,911
Prin. Invest. NASA Tech. Officer CASE Category
 P A AANNSTAD GSFC/D WEST 11-Astronomy

NAG 5-1802 Arizona State University 1287
 ANALYSIS OF IUE SPECTRA OF NOVAE IN OUTBURST
Period Obligations
 09/18/1991-09/30/1995 FY94: \$59,114 TOTAL: \$87,913
Prin. Invest. NASA Tech. Officer CASE Category
 S G STARRFIELD GSFC/D WEST 11-Astronomy

NAG 5-1976 Arizona State University 1288
 GLOBAL PROPERTIES OF MAGELLANIC CLOUD STELLAR X-RAY SOURCES
Period Obligations
 05/04/1992-05/14/1993 FY94: \$0 TOTAL: \$42,802
Prin. Invest. NASA Tech. Officer CASE Category
 A P COWLEY GSFC/R PETRE 11-Astronomy

NAG 5-2101 Arizona State University 1289
 THE UV SPECTRUM OF THE LOW-MASS X-RAY BINARY 2S092 1-630
Period Obligations
 09/15/1992-03/31/1994 FY94: \$0 TOTAL: \$6,000
Prin. Invest. NASA Tech. Officer CASE Category
 P C SCHMIDTKE GSFC/D WEST 11-Astronomy

NAG 5-2211 Arizona State University 1290
 BLAST WAVE/ISM INTERACTIONS IN THE EASTERN SUBSHELL OF IC 443
Period Obligations
 02/18/1993-02/28/1994 FY94: \$0 TOTAL: \$37,000
Prin. Invest. NASA Tech. Officer CASE Category
 J J HESTER GSFC/R PETRE 11-Astronomy

NAG 5-2322 Arizona State University 1291
 A ROSAT DEEP SURVEY OF THE BEST STUDIES HIGH LATITUDE AREAS
Period Obligations
 07/22/1993-07/31/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
 R A WINDHORST GSFC/R PETRE 11-Astronomy

NAG 5-2553 Arizona State University 1292
 COMPLETION OF A STUDY OF GLOBAL PROPERTIES OF LMC STELLAR X-RAY SOURCES
Period Obligations
 03/14/1994-03/31/1995 FY94: \$51,000 TOTAL: \$51,000
Prin. Invest. NASA Tech. Officer CASE Category
 A P CONWAY GSFC/R PETRE 11-Astronomy

NAG 8-1035 Arizona State University 1293
 TEMPORAL AND SPECTRAL VARIATIONS OF 2S 0921-630 AND LMC X-2
Period Obligations
 02/11/1994-05/02/1994 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
 P C SCHMIDTKE MSFC/J VARGAS 11-Astronomy

NAG 9-59 Arizona State University 1294
 MINERALOGY OF CARBONACEOUS CHONDRITES
Period Obligations
 02/15/1983-02/01/1994 FY94: \$0 TOTAL: \$1,076,650
Prin. Invest. NASA Tech. Officer CASE Category
 P R BUSECK JSC/I D BROWN 32-Geological Sci
 K TOMEOKA

NAG 9-183 Arizona State University 1295
 METEORITE STUDY
Period Obligations
 10/01/1986-10/01/1994 FY94: \$0 TOTAL: \$77,000
Prin. Invest. NASA Tech. Officer CASE Category
 C B MOORE JSC/I D BROWNE 32-Geological Sci

NAGW 529 Arizona State University 1296
 FIELD MEASUREMENTS OF THE 1983 EAST RIFT BASALT FLOWS AT KITAUEA VOLCANO
Period Obligations
 03/01/1984-12/31/1996 FY94: \$72,400 TOTAL: \$359,460
Prin. Invest. NASA Tech. Officer CASE Category
 J FINK HQ/J R UNDERWOOD 32-Geological Sci
 HQ/J M BOYCE

NAGW 547 Arizona State University 1297
 SPECTROSCOPY OF COMETS
Period Obligations
 02/15/1984-11/30/1993 FY94: \$0 TOTAL: \$614,122
Prin. Invest. NASA Tech. Officer CASE Category
 S WYCKOFF HQ/H C BRINTON 11-Astronomy
 HQ/J H RAHE

NAGW 943 Arizona State University 1298
 THERMAL INFRARED SPECTRAL MEASUREMENTS OF GEOLOGIC MATERIAL
Period Obligations
 07/15/1986-12/31/1995 FY94: \$110,631 TOTAL: \$525,070
Prin. Invest. NASA Tech. Officer CASE Category
 P R CHRISTENSEN HQ/J M BOYCE 32-Geological Sci
 HQ/J M BOYCE

NAGW 1306 Arizona State University 1299
 MAPPING PLANETARY AND SATELLITE SURFACES
Period Obligations
 08/21/1988-12/31/1994 FY94: \$71,775 TOTAL: \$513,503
Prin. Invest. NASA Tech. Officer CASE Category
 R GREELEY HQ/J M BOYCE 32-Geological Sci
 HQ/D H SCOTT

NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)

NAGW 1395 Arizona State University 1300
 EVOLUTION OF PHOTOSYNTHESIS
Period Obligations
 08/08/1988-06/30/1993 FY94: \$39,088 TOTAL: \$372,447
Prin. Invest. NASA Tech. Officer CASE Category
 R E BLANKENSHIP HQ/J D RUMMEL 51-Biological Sci

NAGW 1654 Arizona State University 1301
 COMPREHENSIVE INVESTIGATION OF HGCDE METAL-ORGANIC
 CHEM. VAP
Period Obligations
 03/09/1989-03/14/1993 FY94: \$0 TOTAL: \$223,600
Prin. Invest. NASA Tech. Officer CASE Category
 G B RAUPP HQ/J K ALEXANDER 47-Materials Engr
 HQ/D A HOLLAND

NAGW 1740 Arizona State University 1302
 FLUID DYNAMICS OF MULTIPHASE FLOW IN VOLCANIC
 ENVIRONMENTS
Period Obligations
 04/18/1989-10/31/1993 FY94 \$0 TOTAL: \$114,400
Prin. Invest. NASA Tech. Officer CASE Category
 SANDERS HQ/J R UNDERWOOD 32-Geological Sci

NAGW 1774 Arizona State University 1303
 GEOLOGIC MAPPING OF HADRIACA PATERA AND TYRRHENA
 PATERA
Period Obligations
 06/21/1989-03/31/1997 FY94: \$25,005 TOTAL: \$71,554
Prin. Invest. NASA Tech. Officer CASE Category
 R GREELEY HQ/J R UNDERWOOD 32-Geological Sci

NAGW 1899 Arizona State University 1304
 ORGANIC CHEMISTRY OF CARBONACEOUS METEORITES
Period Obligations
 10/31/1989-09/30/1994 FY94: \$105,000 TOTAL: \$485,000
Prin. Invest. NASA Tech. Officer CASE Category
 J R CRONIN HQ/J D RUMMEL 32-Geological Sci

NAGW 2064 Arizona State University 1305
 NAGW-2064/ARIZONA STATE UNIV/STUDIES OF MARTIAN AEOLIAN
 GEOLGOY
Period Obligations
 05/04/1990-09/30/1994 FY94: \$75,000 TOTAL: \$379,998
Prin. Invest. NASA Tech. Officer CASE Category
 R GREELEY HQ/T A MAXWELL 32-Geological Sci

NAGW 2102 Arizona State University 1306
 GEOLOGICAL STUDIES IN PLANETOLOGY
Period Obligations
 05/04/1990-09/30/1994 FY94: \$190,000 TOTAL: \$1,102,799
Prin. Invest. NASA Tech. Officer CASE Category
 R GREELEY HQ/T A MAXWELL 32-Geological Sci

NAGW 2221 Arizona State University 1307
 CO2 AND H2O IN MARTIAN MAGMAS: PRE-ERUPTION LEVEL S AND
 DEGASSING
Period Obligations
 02/22/1991-03/31/1994 FY94: \$0 TOTAL: \$165,362
Prin. Invest. NASA Tech. Officer CASE Category
 J R HOLLOWAY HQ/J M BOYCE 32-Geological Sci

NAGW 2241 Arizona State University 1308
 NAGW-2241/ARIZONA STATE UNIV/COMETS AS PROBES OF A
 STAR-FORMING ENVIRONMENT
Period Obligations
 05/23/1991-10/31/1993 FY94: \$0 TOTAL: \$100,200
Prin. Invest. NASA Tech. Officer CASE Category
 S WYCOFF HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2273 Arizona State University 1309
 COSMOCHEMISTRY AND THE ORIGIN OF SOLAR SYSTEMS
Period Obligations
 05/21/1991-10/31/1993 FY94: \$0 TOTAL: \$75,027
Prin. Invest. NASA Tech. Officer CASE Category
 J W LARIMER HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2274 Arizona State University 1310
 EARLY ATMOSPHERE/MAGNA OCEAN EQUILIBRIA; EXPERIMENTAL
 DETERMINATION OF NITROGEN, AMMONIA, AND CARBO
Period Obligations
 05/21/1991-04/30/1997 FY94: \$0 TOTAL: \$89,998
Prin. Invest. NASA Tech. Officer CASE Category
 J R HOLLOWAY HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2276 Arizona State University 1311
 OXYGEN ISOTOPIC HETEROGENEITY IN OLIVINE AND PYROXENE
 FROM ORDINARY, CARBONACEOUS AND ENSTATITE CHON.
Period Obligations
 12/06/1990-10/31/1996 FY94: \$20,422 TOTAL: \$81,690
Prin. Invest. NASA Tech. Officer CASE Category
 R L HERVIG HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2289 Arizona State University 1312
 MARS SURFACE COMPOSITION AND PROCESSES
Period Obligations
 06/13/1991-10/31/1993 FY94: \$0 TOTAL: \$105,000
Prin. Invest. NASA Tech. Officer CASE Category
 P R CHRISTENSEN HQ/T A MAXWELL 32-Geological Sci

NAGW 2343 Arizona State University 1313
 INTEGRATED INVESTIGATIONS OF TRITONS ERUPTIVE PLUMES
Period Obligations
 02/15/1991-11/30/1993 FY94: \$0 TOTAL: \$70,000
Prin. Invest. NASA Tech. Officer CASE Category
 C SANDERS HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2622 Arizona State University 1314
 NAGW-2622/ARIZONA STATE UNIV/GEOLOGY OF ANCIENT VOLCANOES,
 NORTHERN PLAINS, AND POTENTIAL LANDING SITE
Period Obligations
 08/21/1991-04/30/1995 FY94: \$75,000 TOTAL: \$195,000
Prin. Invest. NASA Tech. Officer CASE Category
 R GREELEY HQ/W L QUAIDE 32-Geological Sci

NAGW 2628 Arizona State University 1315
 NAGW-2628/ARIZONA STATE UNIV/MODEL ATMOSPHERE ANALYSES
 OF ULTRAVIOLET SPECTRA OF NOVAE IN OUTBURST
Period Obligations
 08/09/1991-04/30/1995 FY94: \$87,600 TOTAL: \$327,193
Prin. Invest. NASA Tech. Officer CASE Category
 S G STARRFIELD HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)

NAGW 2949 Arizona State University 1316
MARS ANALOG SITE SELECTION STUDY
Period Obligations
03/04/1992-01/31/1994 FY94: \$0 TOTAL: \$110,261
Prin. Invest. NASA Tech. Officer CASE Category
R GREELEY HQ/J M BOYCE 32-Geological Sci

NAGW 4042 Arizona State University 1324
PLANETARY GEOSCIENCE EDUCATION ACTIVITY
Period Obligations
06/16/1994-04/15/1995 FY94: \$31,061 TOTAL: \$31,061
Prin. Invest. NASA Tech. Officer CASE Category
R GREELEY HQ/J BOYCE 32-Geological Sci

NAGW 2989 Arizona State University 1317
SUBMILLIMETER DIRECT ABSORPTION/B EAM SPECTROSCOPY
Period Obligations
03/24/1992-01/31/1995 FY94: \$50,000 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
L M ZIURYS HQ/J L CAROFF 11-Astronomy
T C STEIMLE

NAGW 4105 Arizona State University 1325
COSMOCHEMISTRY OF COMETS AND STAR FORMING REGIONS
Period Obligations
09/01/1994-10/31/1997 FY94: \$33,400 TOTAL: \$33,400
Prin. Invest. NASA Tech. Officer CASE Category
S WYCKOFF HQ/P ROGERS 11-Astronomy

NAGW 3065 Arizona State University 1318
NAGW-3065/ARIZONA STATE UNIV/MOLECULAR CLOUD
DIAGNOSTICS OF SOLAR NEBULA CHEMISTRY
Period Obligations
05/11/1992-03/31/1995 FY94: \$30,000 TOTAL: \$75,300
Prin. Invest. NASA Tech. Officer CASE Category
I M ZIURYS HQ/J A NUTH 19-Phys Sci, NEC

NAS 5-31371 Arizona State University 1326
EOS INVESTIGATION 'ADVANCED SPACEBORNE THERMAL EMISSION
AND REFLECTION'
Period Obligations
12/23/1991-12/22/2001 FY94: \$77,000 TOTAL: \$182,500
Prin. Invest. NASA Tech. Officer CASE Category
P CHRISTENSEN GSFC/H BLODGET 39-Env Sci, NEC

NAGW 3386 Arizona State University 1319
MATRIX MINERALOGY OF CARBONACEOUS CHONDRITE METEO
RITES
Period Obligations
02/24/1993-02/14/1995 FY94: \$122,313 TOTAL: \$251,063
Prin. Invest. NASA Tech. Officer CASE Category
P R BUSECK HQ/H C BRINTON 32-Geological Sci

NCA 2-778 Arizona State University 1327
MULTIDISCIPLINARY DESIGN OPTIMIZATION USING MULTIO
BJECTIVE FORMULATION TECHNIQUES
Period Obligations
02/04/1993-01/14/1995 FY94: \$40,000 TOTAL: \$80,000
Prin. Invest. NASA Tech. Officer CASE Category
A CHATTOPADHYAY ARC/T A EDWARDS 41-Aero Engr

NAGW 3518 Arizona State University 1320
VENUS AEOLIAN GEOLOGY AND GEOLOGIC MAPPING
Period Obligations
04/09/1993-03/31/1994 FY94: \$82,001 TOTAL: \$162,001
Prin. Invest. NASA Tech. Officer CASE Category
R GREELEY HQ/J T BERGSTRALH 32-Geological Sci

NCA 2-787 Arizona State University 1328
ISOTOPIC ANALYSIS OF METEORITE SULFUR AND ORGANOSULFUR
COMPOUNDS
Period Obligations
02/05/1993-08/14/1993 FY94: TOTAL: \$17,655
Prin. Invest. NASA Tech. Officer CASE Category
J R CRONIN ARC/S CHANG 12-Chemistry

NAGW 3544 Arizona State University 1321
GRAVITY MODELING FLEXURE AND GEODYNAMICS OF VENUS
Period Obligations
04/21/1993-06/14/1995 FY94: \$31,322 TOTAL: \$74,822
Prin. Invest. NASA Tech. Officer CASE Category
R E GRIMM HQ/J T BERGSTRALH 32-Geological Sci

NCC 1-194 Arizona State University 1329
EFFECTS OF SUCTION ON SWEEP-WING TRANSONIC FLOW
Period Obligations
06/17/1994-11/08/1994 FY94: \$79,947 TOTAL: \$79,947
Prin. Invest. NASA Tech. Officer CASE Category
W S SARIC LARC/J R DAGENHART 41-Aero Engr
M REIBERT LARC/M J WALSH
H REED

NAGW 3722 Arizona State University 1322
A PROGRAM TO CURATE, INVESTIGATE AND DESCRIBE METEO
RITES
Period Obligations
08/26/1993-06/30/1994 FY94: \$0 TOTAL: \$11,250
Prin. Invest. NASA Tech. Officer CASE Category
C MOORE HQ/RAHE 32-Geological Sci

NCC 2-346 Arizona State University 1330
LABORATORY SIMULATIONS OF MARTIAN AND VENUSIAN
AEOPROCESSSES
Period Obligations
03/01/1985-02/28/1995 FY94: \$143,728 TOTAL: \$990,036
Prin. Invest. NASA Tech. Officer CASE Category
R GREELEY ARC/B F SMITH 32-Geological Sci
J MARSHALL HQ/J P POLLAEF

NAGW 3923 Arizona State University 1323
PLANETARY SCIENCE FOR EDUCATION ENHANCEMENT
Period Obligations
04/12/1994-01/31/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
P CHRISTENSEN HQ/M KICZA 11-Astronomy

NCC 2-795 Arizona State University 1331
AN INTEGRATED OPTIMUM DESIGN APPROACH FOR HIGH SPEED
PROPULSORS INCLUDING ACOUSTIC CONSTRAINTS
Period Obligations
05/06/1993-03/31/1995 FY94: \$0 TOTAL: \$103,457
Prin. Invest. NASA Tech. Officer CASE Category
A CHATTOPADHYAY ARC/J F MADDEN 41-Aero Engr
ARC/P D PALBOT

NASA'S UNIVERSITY PROGRAM

ARIZONA (Continued)

NCC 2-5064 Arizona State University 1332
 DEVELOPMENT OF MULTIOBJECTIVE OPTIMIZATION TECHNIQ UES
 FOR SONIC BOOM MINIMIZATION
Period Obligations
 06/03/1994-05/15/1995 FY94: \$40,000 TOTAL: \$40,000
Pnn. Invest. NASA Tech. Officer CASE Category
 A CHATTOPADHYAY ARC/E TU 41-Aero Engr
 J R NARAYAN ARC/T L HOLST

NGT 00-010-027 Arizona State University 1333
 MEASUREMENT OF MICROPARTICLES IN LOW EARTH ORBIT O N
 BOARD THE SATELLITE ASUSAT1
Period Obligations
 08/12/1994-08/15/1995 FY94: \$38,000 TOTAL: \$38,000
Pnn. Invest. NASA Tech. Officer CASE Category
 H REED HQ/L KEFFER 42-Astro Engr

NGT 00-050-745 Arizona State University 1334
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/22/1991-08/15/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
 H L REED HQ/F C OWENS 42-Astro Engr

NGT 00-070-155 Arizona State University 1335
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 08/31/1989-07/14/1994 FY94: \$18,000 TOTAL: \$102,000
Pnn. Invest. NASA Tech. Officer CASE Category
 W GRAF HQ/M MOORE 32-Geological Sci

NAGW 2732 Navajo Community College 1336
 NAVAJO COMMUNITY SUMMER INSTITUTE
Period Obligations
 09/12/1991-06/07/1995 FY94: \$76,667 TOTAL: \$287,501
Pnn. Invest. NASA Tech. Officer CASE Category
 T GORMAN-KEITH HQ/B WHITE 99-Multi-Discip

NAG 2-6003 Northern Arizona University 1337
 PATHWAYS LEADING TO SUCCESS (PALS)
Period Obligations
 08/29/1994-08/31/1995 FY94: \$29,500 TOTAL: \$29,500
Pnn. Invest. NASA Tech. Officer CASE Category
 S L BRINKERHOFF ARC/D M COOPER 49-Engr, NEC

NAG 5-1761 Northern Arizona University 1338
 ACCURATE DETERMINATION OF LUNAR PHOTOMETRY
Period Obligations
 09/13/1991-11/14/1994 FY94: \$0 TOTAL: \$277,900
Pnn. Invest. NASA Tech. Officer CASE Category
 R L WILDEY GSFC/B W GUENTHER 11-Astronomy

NAG 5-2159 Northern Arizona University 1339
 TO ESTABLISH THE MOON AS A RADIANCE STANDARD
Period Obligations
 12/14/1992-12/14/1994 FY94: \$0 TOTAL: \$138,400
Pnn. Invest. NASA Tech. Officer CASE Category
 R L WILDEY GSFC/B W GUENTHER 39-Env Sci, NEC

NAG 9-518 Northern Arizona University 1340
 UNIV JOINT VENTURE IN SPACE SCIENCE
Period Obligations
 05/09/1991-05/01/1995 FY94: \$27,500 TOTAL: \$114,031
Pnn. Invest. NASA Tech. Officer CASE Category
 H O HOOPER JSC/S GOLDSTEIN 11-Astronomy

NAGW 979 Northern Arizona University 1341
 ALBA PATERA 1:500,000 SCALE MAP
Period Obligations
 10/01/1986-12/31/1993 FY94: \$0 TOTAL: \$197,000
Pnn. Invest. NASA Tech. Officer CASE Category
 H E HOLT HQ/J M BOYCE 32-Geological Sci
 HQ/J R UNDOUWOOD

NAGW 2303 Northern Arizona University 1342
 TROJAN ASTEROIDS AS WITNESSES TO THE ORIGIN OF THE GREAT
 PLANETS
Period Obligations
 06/13/1991-10/31/1993 FY94: \$0 TOTAL: \$120,000
Pnn. Invest. NASA Tech. Officer CASE Category
 C S SHOEMAKER HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2811 Northern Arizona University 1343
 SOLAR SYSTEM SPECTROSCOPY
Period Obligations
 01/03/1992-11/30/1995 FY94: \$53,500 TOTAL: \$246,499
Pnn. Invest. NASA Tech. Officer CASE Category
 B L LUTZ HQ/W L QUAIDE 11-Astronomy

NAGW 3800 Northern Arizona University 1344
 SUPPORT OF NATIVE AMERICAN STUDENTS IN PLANETARY G
 EOLOGY
Period Obligations
 10/12/1993-07/31/1994 FY94: \$9,289 TOTAL: \$9,289
Pnn. Invest. NASA Tech. Officer CASE Category
 C BARNES HQ/J M BOYCE 32-Geological Sci

NAGW 3847 Northern Arizona University 1345
 NAGW-3847/B NORTHERN ARIZ. UNIV. 'ORIGIN AND EVOLU TION
 OF TITAN'S ATMOSPHERE'
Period Obligations
 01/12/1994-11/30/1994 FY94: \$70,080 TOTAL: \$70,080
Pnn. Invest. NASA Tech. Officer CASE Category
 C GRIFFITH HQ/J H RAHE 11-Astronomy

NAGW 3906 Northern Arizona University 1346
 NAGW-3906/B NORTHERN ARIZONA UNIV. ' NIZHONI ACADE MY'
 12-MONTH AWARD
Period Obligations
 04/06/1994-02/28/1995 FY94: \$51,210 TOTAL: \$51,210
Pnn. Invest. NASA Tech. Officer CASE Category
 A TANAKEYOWMA HQ/B L WHITE 99-Multi-Discip

NGT 00-010-015 Northern Arizona University 1347
 NGT-10015/NORTHERN ARIZONA UNIV/EDUCAT TRAINING EX PERI
 IN SOLAR SYSTEM ASTRONOMY
Period Obligations
 12/01/1993-09/30/1994 FY94: \$50,000 TOTAL: \$50,000
Pnn. Invest. NASA Tech. Officer CASE Category
 B L LUTZ HQ/E T SCHWARTZ 11-Astronomy

NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)

NGT 00-090-028 Northern Arizona University 1348
 NATIVE AMERICAN SCIENCE AND ENGINEERING ADVANCEMENT PROGRAM
Period Obligations
 11/14/1989-05/31/1995 FY94: \$66,824 TOTAL: \$737,137
Prin. Invest. NASA Tech. Officer CASE Category
 C N HOLLAND HQ/Y B FREEMAN 49-Engr, NEC
 J GRAY

NAG 1-1135 University of Arizona 1349
 LEADING EDGE RECEPTIVITY FOR BLUNT NOISE BODIES.
Period Obligations
 05/02/1990-04/30/1993 FY94: \$0 TOTAL: \$108,068
Prin. Invest. NASA Tech. Officer CASE Category
 E J KERSCHEN LARC/T B GATSKI 41-Aero Engr
 LARC/C L STRESTT

NAG 1-1422 University of Arizona 1350
 NUMERICAL SIMULATION OF RECEPTIVITY AND TRANSITION IN A BOUNDARY LAYER ON A FLAT PLATE WITH SUCTION
Period Obligations
 04/29/1992-04/22/1995 FY94: \$35,500 TOTAL: \$106,500
Prin. Invest. NASA Tech. Officer CASE Category
 H F FASEL LARC/C L STRETT 41-Aero Engr
 LARC/A KUMAR

NAG 1-1611 University of Arizona 1351
 AN EXPERIMENTAL STUDY OF A CAPTURED LARGE VORTEX WHICH ALSO CONTAINS AXIAL FLOWS
Period Obligations
 04/11/1994-04/05/1995 FY94: \$53,700 TOTAL: \$53,700
Prin. Invest. NASA Tech. Officer CASE Category
 I J WYGNANSKI LARC/K B PASCHAL 41-Aero Engr

NAG 1-1626 University of Arizona 1352
 IMPLEMENTATION OF FREE-FORMULATION-BASED FLAT SHELL AND BEAM ELEMENTS INTO THE NASA COMET CODE,
Period Obligations
 05/25/1994-05/24/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
 E MADENCI LARC/A TESSLER 46-Mech Engr

NAG 1-1629 University of Arizona 1353
 RESEARCH ON ACTIVE SONIC BOOM ABATEMENT RESEARCH ON ACTIVE SONIC BOOM ABATEMENT
Period Obligations
 05/18/1994-09/30/1994 FY94: \$70,100 TOTAL: \$70,100
Prin. Invest. NASA Tech. Officer CASE Category
 S C CROW LARC/C M DARDEN 41-Aero Engr

NAG 2-143 University of Arizona 1354
 PARTICIPATION IN THE PIONEER VENUS MISSION
Period Obligations
 10/01/1981-09/30/1993 FY94: \$0 TOTAL: \$698,105
Prin. Invest. NASA Tech. Officer CASE Category
 D M HUNTEN ARC/L E LASHER 19-Phys Sci, NEC
 ARC/R A CRAIG

NAG 2-206 University of Arizona 1355
 INFRARED SPECTROSCOPY OF PLANETARY ATMOSPHERES FROM THE KUIPER AIRBORNE OBSERVATORY
Period Obligations
 11/01/1987-10/31/1994 FY94: \$10,000 TOTAL: \$2,179,199
Prin. Invest. NASA Tech. Officer CASE Category
 H P LARSON ARC/C D LAUGHLIN 11-Astronomy
 D S DAVIS
 J H BLACK

NAG 2-384 University of Arizona 1356
 SKELETAL MUSCLE METABOLISM IN HYPOKINETIC RATS
Period Obligations
 11/01/1987-06/30/1993 FY94: \$0 TOTAL: \$508,617
Prin. Invest. NASA Tech. Officer CASE Category
 M E TISCHLER ARC/C M WINGET 51-Biological Sci
 ARC/R W BALLARD

NAG 2-392 University of Arizona 1357
 MECHANISTIC STUDIES ON REDUCED EXERCISE PERFORMANCE AND CARDIAC DECONDITIONING WITH SIMULATED ZERO GRA
Period Obligations
 04/15/1986-03/31/1995 FY94: \$77,600 TOTAL: \$785,809
Prin. Invest. NASA Tech. Officer CASE Category
 C M TIPTON ARC/A R HARGERS 59-Life Sci, NEC
 J M OVERTON

NAG 2-620 University of Arizona 1358
 DESIGN AND PERFORMANCE MEASUREMENT SIMULATION STUDIES FOR AN ER-2 SUNPHOTOMETER
Period Obligations
 12/13/1989-06/30/1993 FY94: \$0 TOTAL: \$103,868
Prin. Invest. NASA Tech. Officer CASE Category
 J A REAGAN ARC/S S WEGENER 19-Phys Sci, NEC

NAG 2-782 University of Arizona 1359
 SKELETAL MUSCLE GLUCOSE TRANSPORT DURING SIMULATED WIGHTLESSNESS
Period Obligations
 04/27/1992-02/28/1994 FY94: \$0 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 E J HENRIKSEN ARC/E M HOLTEN 51-Biological Sci
 I

NAG 2-847 University of Arizona 1360
 THE SYMPOSIUM ON AERODYNAMICS AND AEROACOUSTICS
Period Obligations
 06/16/1993-12/31/1993 FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
 K Y FUNG ARC/S DAVIS 41-Aero Engr

NAG 2-901 University of Arizona 1361
 MID-IR SPECTROSCOPY OF THE JOVIAN STRATOSPHERE PERTURBED BY COMET P/SHOMAKER-LEVY IMPACT
Period Obligations
 05/18/1994-01/14/1995 FY94: \$46,830 TOTAL: \$46,830
Prin. Invest. NASA Tech. Officer CASE Category
 D M HUNTEN ARC/C D LAUGHLIN 11-Astronomy
 ARC/C M GILLESPIE

NAG 2-906 University of Arizona 1362
 RESEARCH CONCERNING THE NET FLUX OF RADIATION IN THE ATMOSPHERE OF JUPITER
Period Obligations
 06/15/1994-09/30/1994 FY94: \$24,994 TOTAL: \$24,994
Prin. Invest. NASA Tech. Officer CASE Category
 M G TOMASKO ARC/L E LASHER 31-Atmos Sci
 ARC/R E YOUNG

NAG 3-357 University of Arizona 1363
 NOISE GENERATED BY AIRFOILS ENCOUNTERING HIGH FREQUENCY CONVECTED DISTURBANCES EFFECTS OF AIRFOILS
Period Obligations
 11/02/1982-12/28/1992 FY94: TOTAL: \$546,129
Prin. Invest. NASA Tech. Officer CASE Category
 E J KERSCHEN LERC/J F GROENEWEG 41-Aero Engr

NASA'S UNIVERSITY PROGRAM

ARIZONA (Continued)

NAG 3-781 University of Arizona 1364
 NONLINEAR EVOLUTION OF COHERENT STRUCTURES IN
 SUPERSONIC SHEAR LAYERS
Period *Obligations*
 02/05/1987-03/03/1994 FY94: \$0 TOTAL: \$98,334
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T BALSA LERC/J H MILES 41-Aero Engr
 LERC/E RICE

NAG 3-1268 University of Arizona 1365
 FLUID MECHANICS OF DIRECTIONAL SOLIDIFICATION AT REDUCED
 GRAVITY
Period *Obligations*
 04/09/1991-12/31/1994 FY94: \$0 TOTAL: \$225,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C F CHEN LERC/T K GLASGOW 47-Materials Engr

NAG 3-1386 University of Arizona 1366
 MARANGONI AND DOUBLE-DIFFUSIVE CONVECTION IN A FLUID
 LAYER UNDER MICROGRAVITY
Period *Obligations*
 11/30/1992-10/28/1994 FY94: \$100,551 TOTAL: \$196,918
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C F CHEN LERC/J A SALZMAN 19-Phys Sci, NEC

NAG 3-1436 University of Arizona 1367
 A PROPOSAL FOR THE SYMPOSIUM ON AERODYNAMICS AND AERO-
 ACOUSTICS
Period *Obligations*
 01/19/1993-07/14/1993 FY94: \$0 TOTAL: \$3,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K FUNG LERC/M E GOLDSTEIN 41-Aero Engr

NAG 3-1442 University of Arizona 1368
 A THEORETICAL STUDY OF LEADING-EDGE DEVICES FOR ACTIVE
 AND PASSIVE CONTROL OF WAKE-AIRFOIL INTERACTION
Period *Obligations*
 01/19/1993-02/17/1995 FY94: \$52,537 TOTAL: \$113,901
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E KERSCHEN LERC/L J HEIDELBERG 41-Aero Engr

NAG 3-1446 University of Arizona 1369
 COMPUTER SIMULATIONS OF DENDRITIC ALLOYS SOLIDIFIED IN
 TERRESTRIAL AND LOW-GRAVITY ENVIRONMENTS
Period *Obligations*
 02/08/1993-01/31/1995 FY94: \$75,503 TOTAL: \$161,976
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D R POIRIER LERC/A CHAIT 47-Materials Engr
 LERC/E NELSON

NAG 3-1499 University of Arizona 1370
 ADVANCED CONCENTRATOR ARRAY DEVELOPMENT
Period *Obligations*
 06/15/1993-08/19/1995 FY94: \$75,000 TOTAL: \$125,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P A FRANKEN LERC/D J FLOOD 42-Astro Engr
 V M ANDREEV LERC/H B CURTIS

NAG 3-1524 University of Arizona 1371
 ASYMPTOTIC THEORY FOR DISTRIBUTED RECEPTIVITY
Period *Obligations*
 09/14/1993-09/16/1995 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E J KERSCHEN LERC/L S HULTGREEN 41-Aero Engr

NAG 5-434 University of Arizona 1372
 IUE OBSERVATIONS OF SATURN'S RINGS; WHITE DWARF LIGMAN
 ALPHA PROFILES
Period *Obligations*
 07/01/1984-08/31/1995 FY94: \$47,897 TOTAL: \$274,470
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J B HOLBERT GSFC/Y KONDO 11-Astronomy
 E M SION

NAG 5-637 University of Arizona 1373
 EUV SPECTRAL IMAGER
Period *Obligations*
 07/11/1990-12/31/1994 FY94: \$120,000 TOTAL: \$721,282
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A L BROADFOOT GSFC/L J EARLY 13-Physics
 GSFC/R H PLESS

NAG 5-1370 University of Arizona 1374
 STUDY OF EXTENDED STRUCTURES IN ZODIACAL THERMAL
 EMISSION
Period *Obligations*
 04/12/1990-06/30/1995 FY94: \$85,100 TOTAL: \$315,100
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M V SYKES GSFC/D WEST 11-Astronomy

NAG 5-1496 University of Arizona 1375
 INVESTIGATION OF BACKSCATTERED ALBEDOS AS MEASURED BY
 THE TOMS INSTRUMENT
Period *Obligations*
 03/13/1991-04/30/1995 FY94: \$120,646 TOTAL: \$478,546
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B M HERMAN GSFC/R D MCPETERS 31-Atmos Sci
 GSFC/R S STOLARSKI

NAG 5-1572 University of Arizona 1376
 STUDY THERMAL CONTROL SYSTEMS FOR LOW TEMPERATURE
 HEAT REJECTION
Period *Obligations*
 05/20/1991-08/14/1995 FY94: \$29,904 TOTAL: \$182,912
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K R SRIDHAR GSFC/T D SWANSON 41-Aero Engr

NAG 5-1642 University of Arizona 1377
 INTERACTION OF TERRESTRIAL AND ATMOSPHERIC HYDROLOGICAL
 CYCLES IN THE CONTEXT OF THE NORTH AMERICAN
 MONSOON
Period *Obligations*
 08/01/1991-07/31/1995 FY94: \$90,000 TOTAL: \$322,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R E DICKINSON GSFC/W LAU 31-Atmos Sci

NAG 5-1711 University of Arizona 1378
 PSPC OBSERVATIONS OF INFRARED COLOR-SELECTED QSOs
Period *Obligations*
 08/01/1991-07/31/1993 FY94: \$0 TOTAL: \$26,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R M CUTRI GSFC/R PETRE 11-Astronomy

NAG 5-1712 University of Arizona 1379
 ASSESSMENT OF A PROTOTYPE SUNPHOTOMETER FOR NETWORK
 APPLICATIONS-PHASE I
Period *Obligations*
 08/01/1991-09/14/1994 FY94: \$5,000 TOTAL: \$40,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J A REAGAN GSFC/B N HOLBEN 22-Computer Science

NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)

NAG 5-1867 University of Arizona 1380
HIGH REDSHIFT QSOS AND THE X-RAY BACKGROUND
Period Obligations
01/22/1992-08/31/1993 FY94: \$0 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
C D IMPEY GSFC/R PETRE 11-Astronomy

NAG 5-2367 University of Arizona 1388
STUDIES IN SUPPORT OF REMOTE SENSING GAMMA-RAY
Period Obligations
09/22/1993-09/30/1995 FY94: \$10,007 TOTAL: \$10,007
Prin. Invest. NASA Tech. Officer CASE Category
W V BOYNTON GSFC/J I TROMBKA 11-Astronomy

NAG 5-2080 University of Arizona 1381
PSPC OBSERVATIONS OF HIGH REDSHIFT QSOS
Period Obligations
08/25/1992-08/31/1995 FY94: \$15,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
J BECHTOLD GSFC/R PETRE 11-Astronomy

NAG 5-2384 University of Arizona 1389
DETERMINATION OF CLOUD RADIATIVE AND MICROPHYSICAL
PROPERTIES FROM CLOUD ABSORPTION RADIOMETER. . .
Period Obligations
10/06/1993-01/31/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
B H HERMAN GSFC/M D KING 31-Atmos Sci

NAG 5-2198 University of Arizona 1382
CONTENT - BASED QUERY AND BROWSE OF EARTH SCIENCE
IMAGERY DATABASES USING HIGH PERF. COMPUTERS AND NET
Period Obligations
02/25/1993-11/30/1994 FY94: \$29,968 TOTAL: \$59,665
Prin. Invest. NASA Tech. Officer CASE Category
R A SCHOWENGERDT GSFC/J R FISCHER 22-Computer Science
L L PETERSON
C J TURNER

NAG 5-2427 University of Arizona 1390
GENERATION OF TERE-HERTZ RADIATION CO2 LASERS AND AN
ASYMMETRIC MULTIPLE QUANTUM WELL
Period Obligations
11/09/1993-11/14/1994 FY94: \$48,078 TOTAL: \$48,078
Prin. Invest. NASA Tech. Officer CASE Category
A MARATHAY GSFC/B D SEERY 11-Astronomy

NAG 5-2251 University of Arizona 1383
THE PHYSICAL FOUNDATIONS OF PARTICLE ACCELERATION BY
COLLISIONLESS SHOCKS IN SPACE
Period Obligations
04/27/1993-04/30/1995 FY94: \$86,000 TOTAL: \$120,500
Prin. Invest. NASA Tech. Officer CASE Category
J R JOKIPII GSFC/T J BIRMINGHAM 13-Physics
GSFC/J D BOHLIN

NAG 5-2428 University of Arizona 1391
IRAS STUDIES OF QUASAR ABSORPTION LINE SYSTEMS
Period Obligations
11/09/1993-11/14/1994 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
J BECHTOLD GSFC/D WEST 11-Astronomy

NAG 5-2268 University of Arizona 1384
THE EUV OPACITY AND H CONTENT OF HOT DA WHITE DWARFS
Period Obligations
05/07/1993-11/30/1994 FY94: \$0 TOTAL: \$50,921
Prin. Invest. NASA Tech. Officer CASE Category
R W TWEEDY GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2435 University of Arizona 1392
MULTIWAVELENGTH SPECTRAL SYNTHESIS MODELS OF SUPER
NOVA
Period Obligations
11/16/1993-11/30/1994 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest. NASA Tech. Officer CASE Category
P A PINTO GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2269 University of Arizona 1385
TEMPERATURE AND COMPOSITION OF A UNIQUE HOT DA WHITE
DWARF AND TEMP. AND COMP. OF WHITE DWARFS . . .
Period Obligations
05/07/1993-05/31/1995 FY94: \$44,360 TOTAL: \$94,051
Prin. Invest. NASA Tech. Officer CASE Category
J B HOLBERG GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2448 University of Arizona 1393
ATMOSPHERIC CHARACTERIZATION AND LANDSAT-6 ETM CAL
IBRATION
Period Obligations
12/06/1994-01/31/1994 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
P SLATER GSFC/B MARKHAM 39-Env Sci, NEC

NAG 5-2310 University of Arizona 1386
INCORPORATION OF BOREAL FOREST ECOSYSTEM DESCRIPTION
INTO CLIMATE MODELING FRAMEWORK
Period Obligations
07/12/1993-07/14/1995 FY94: \$30,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
R E DICKINSON GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 5-2480 University of Arizona 1394
THE DYNAMICAL AND PHYSICAL STATE OF THE INTERSTELLAR
MEDIUM IN DWARF GALAXIES
Period Obligations
01/13/1993-01/31/1995 FY94: \$29,000 TOTAL: \$29,000
Prin. Invest. NASA Tech. Officer CASE Category
R C KENNICUTT JR. GSFC/R PETRE 11-Astronomy

NAG 5-2311 University of Arizona 1387
FOLLOW-UP OBSERVATIONS OF DIFFUSE EMISSION IN OPHI
UCHUS
Period Obligations
07/07/1993-07/14/1994 FY94: \$0 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
J B HOLBERG GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2502 University of Arizona 1395
IUE SPECTRA OF TWO NEW PRE-CATAclysmic BINARY SYST
EMS
Period Obligations
02/08/1994-02/14/1995 FY94: \$2,500 TOTAL: \$2,500
Prin. Invest. NASA Tech. Officer CASE Category
R TWEEDY GSFC/D WEST 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)**

NAG 5-2503 University of Arizona 1396
MAINTAINING THE THIRD INTERPLANETARY NETWORK
Period *Obligations*
02/16/1994-02/28/1995 FY94: \$34,000 TOTAL: \$34,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J G LAROS GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2535 University of Arizona 1397
DYNAMICS OF CLUSTERS OF GALAXIES
Period *Obligations*
02/21/1994-03/14/1995 FY94: \$4,413 TOTAL: \$4,413
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M HILL GSFC/P PETRE 11-Astronomy

NAG 5-2630 University of Arizona 1398
EUVE OBSERVATIONS OF MAGNETOSPHERIC PHENOMENA ASSOCIATED WITH THE COMETARY IMPACT ON JUPITER
Period *Obligations*
06/28/1994-06/30/1995 FY94: \$17,500 TOTAL: \$17,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F L HERBERT GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2642 University of Arizona 1399
INTEGRATED 12 MICRON EMISSION FROM DWARF SPHEROIDAL GALAXIES
Period *Obligations*
07/05/1994-07/14/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E W OLSZEWSKI GSFC/D WEST 11-Astronomy

NAG 8-889 University of Arizona 1400
AN ANALYSIS OF THE ROLE OF TOPOGRAPHY CYCLOGENESIS OF THE EASTERN PACIFIC
Period *Obligations*
08/14/1991-08/18/1993 FY94: \$0 TOTAL: \$48,730
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A ZEHNDER MSFC/J W KAUFMAN 31-Atmos Sci

NAG 8-909 University of Arizona 1401
RESEARCH
Period *Obligations*
04/14/1992-12/31/1993 FY94: \$64,784 TOTAL: \$64,784
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C BAYGENTS MSFC/R S SNYDER 19-Phys Sci, NEC

NAG 8-944 University of Arizona 1402
NO-EQUILIBRIUM PHASE TRANSFORMATIONS
Period *Obligations*
12/16/1992-11/30/1994 FY94: \$145,000 TOTAL: \$290,002
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K A MATTHEWS MSFC/M P VOLZ 47-Materials Engr

NAG 8-948 University of Arizona 1403
STUDIES ON THE RESPONSE OF EMULSIONS TO EXTERNALLY IMPOSED ELECTRIC AND VELOCITY FIELDS
Period *Obligations*
01/25/1993-01/21/1995 FY94: \$85,000 TOTAL: \$170,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C BAYGENTS MSFC/P H RHODES 47-Materials Engr
H A STONE

NAG 8-1079 University of Arizona 1404
PLASMA IMAGING
Period *Obligations*
06/08/1994-06/30/1995 FY94: \$81,900 TOTAL: \$81,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L BROADFOOT MSFC/C L JOHNSON 31-Atmos Sci

NAG 9-39 University of Arizona 1405
METEORITIC BASALTS
Period *Obligations*
02/01/1983-03/01/1994 FY94: \$0 TOTAL: \$1,314,888
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J DRAKE JSC/I D BROWNE 12-Chemistry

NAG 9-233 University of Arizona 1406
COSMOGENIC ¹⁴C IN METEORITES
Period *Obligations*
06/01/1987-06/01/1994 FY94: \$0 TOTAL: \$193,147
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A J JULL JSC/I D BROWNE 32-Geological Sci

NAG 9-240 University of Arizona 1407
NOBLE GAS STUDIES OF EARLY SOLAR SYSTEM
Period *Obligations*
06/15/1987-06/01/1994 FY94: \$0 TOTAL: \$188,026
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T D SWINDLE JSC/I D BROWNE 32-Geological Sci

NAG 9-442 University of Arizona 1408
ORIENTATION OF CELLS BY GRAVITY
Period *Obligations*
06/01/1990-06/01/1994 FY94: \$0 TOTAL: \$119,893
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S O KESSLER JSC/C F SAMS 51-Biological Sci
JSC/N M CINTRON

NAG 9-460 University of Arizona 1409
CATION ORDERING IN ORTHOPYROXENES AND THE COOLING RATES OF METEORITES
Period *Obligations*
07/16/1990-05/01/1994 FY94: \$0 TOTAL: \$98,250
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J GANGULY JSC/I D BROWNE 19-Phys Sci, NEC

NAG 9-537 University of Arizona 1410
ENHANCED HYBRIDOMA PRODUCTION USING ELECTROFUSION UNDER MICROGRAVITY
Period *Obligations*
07/01/1991-05/01/1994 FY94: \$0 TOTAL: \$221,625
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D W SAMMONS JSC/S R GONDA 51-Biological Sci

NAGW 247 University of Arizona 1411
COMETARY SPECTROSCOPY
Period *Obligations*
11/01/1981-10/31/1994 FY94: \$50,887 TOTAL: \$552,608
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M LARSON HQ/H C BRINTON 11-Astronomy
HQ/J H RAHE

NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)

NAGW 285			University of Arizona		1412
HYDRO GEOMORPHIC STUDIES OF MARS					
<i>Period</i>	<i>Obligations</i>				
01/15/1982-09/30/1994	FY94: \$30,000	TOTAL: \$472,269			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
V R BAKER	HQ/J R UNDERWOOD	32-Geological Sci			
	HQ/J M BOYCE				
NAGW 428			University of Arizona		1413
CRATER MODIFICATION BY GRAVITY					
<i>Period</i>	<i>Obligations</i>				
03/15/1983-09/30/1994	FY94: \$148,745	TOTAL: \$1,372,060			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
H J MELOSH	HQ/J R UNDERWOOD	32-Geological Sci			
	HQ/D SCOTT				
NAGW 887			University of Arizona		1414
DEVELOPMENT OF CCD SCANNING FOR ASTEROIDS/COMETS					
<i>Period</i>	<i>Obligations</i>				
12/01/1985-11/30/1994	FY94: \$64,501	TOTAL: \$573,513			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
T GEHRELS	HQ/H C BRINTON	11-Astronomy			
	HQ/J H RAHE				
NAGW 896			University of Arizona		1415
RADIOMETRIC CALIBRATION OF THE EOS					
<i>Period</i>	<i>Obligations</i>				
05/15/1986-12/31/1994	FY94: \$125,000	TOTAL: \$1,820,074			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
P SLATER	HQ/A J TUYAHOV	99-Multi-Discip			
	HQ/J E ESTES				
NAGW 909			University of Arizona		1416
OBS AND INT OF RADIATIVE AND PHOTOCHEMICAL PROCESSES					
<i>Period</i>	<i>Obligations</i>				
07/01/1986-02/28/1995	FY94: \$82,732	TOTAL: \$670,381			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
L L HOOD	HQ/R D MCPETERS	31-Atmos Sci			
	HQ/M J PRATHER				
NAGW 1029			University of Arizona		1417
COLLISIONAL AND DYNAMICAL PROCESSES					
<i>Period</i>	<i>Obligations</i>				
12/01/1986-09/30/1994	FY94: \$128,449	TOTAL: \$753,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
R J GREENBERG	HQ/J R UNDERWOOD	32-Geological Sci			
	HQ/J M BOYCE				
NAGW 1039			University of Arizona		1418
THEORETICAL STUDIES OF VOLATILE PROCESSES					
<i>Period</i>	<i>Obligations</i>				
02/15/1987-10/31/1994	FY94: \$61,989	TOTAL: \$356,604			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
J I LUNINE	HQ/J T BERGSTALH	31-Atmos Sci			
	HQ/W L QUAIDE				
NAGW 1059			University of Arizona		1419
COMPOSITION AND DISTRIBUTION OF MARS SURFACE MATERIALS					
<i>Period</i>	<i>Obligations</i>				
01/01/1987-09/30/1993	FY94: \$0	TOTAL: \$519,990			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
R B SINGER	HQ/J UNDERWOOD	32-Geological Sci			
	HQ/J M BOYCE				
NAGW 1146			University of Arizona		1420
INFRARED REFLECTANCE STUDY OF CARBONACEOUS MATERIALS					
<i>Period</i>	<i>Obligations</i>				
08/01/1987-12/31/1994	FY94: \$9,973	TOTAL: \$190,809			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
L A LEBOFISKY	HQ/T A MAXWELL	32-Geological Sci			
	HQ/J M BOYCE				
NAGW 1283			University of Arizona		1421
SEARCH FOR EXTRASOLAR PLANETS					
<i>Period</i>	<i>Obligations</i>				
04/12/1988-11/30/1996	FY94: \$137,834	TOTAL: \$665,852			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
R S MCMILLAN	HQ/H C BRINTON	11-Astronomy			
	HQ/J H RAHE				
NAGW 1285			University of Arizona		1422
SPACE INFRARED DETECTOR DEVELOPMENT					
<i>Period</i>	<i>Obligations</i>				
05/11/1988-12/31/1994	FY94: \$129,875	TOTAL: \$963,073			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
E YOUNG	HQ/F C GILLET	11-Astronomy			
NAGW 1332			University of Arizona		1423
CENTER FOR UTIL. OF LOCAL PLANETARY RESOURCES					
<i>Period</i>	<i>Obligations</i>				
07/13/1988-10/31/1994	FY94: \$1,050,000	TOTAL: \$9,456,940			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
S C CROW	HQ/B F QUIGLEY	49-Engr, NEC			
	K N RAMOHALLI				
NAGW 1419			University of Arizona		1424
IMAGING SPECTROMETER FOR ENERGETIC NEUTRAL ATOMS					
<i>Period</i>	<i>Obligations</i>				
08/11/1988-12/14/1992	FY94:	TOTAL: \$187,311			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
K C HSIEH	HQ/P R MAHAFFY	32-Geological Sci			
NAGW 1498			University of Arizona		1425
AN INVESTIGATION OF THE INTERACTION BETWEEN THE NEUTRAL					
<i>Period</i>	<i>Obligations</i>				
11/17/1988-10/31/1994	FY94: \$39,206	TOTAL: \$224,550			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
F HERBERT	HQ/J T BERGSTALH	11-Astronomy			
NAGW 1549			University of Arizona		1426
PLANETARY SPECTROSCOPY					
<i>Period</i>	<i>Obligations</i>				
12/12/1988-11/30/1994	FY94: \$105,600	TOTAL: \$674,753			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
U FINK	HQ/J H RAHE	11-Astronomy			
NAGW 1555			University of Arizona		1427
INTERIORS OF THE GIANT PLANETS					
<i>Period</i>	<i>Obligations</i>				
12/12/1988-12/31/1995	FY94: \$63,490	TOTAL: \$426,246			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
W B HUBBARD	HQ/J H RAHE	11-Astronomy			

**NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)**

NAGW 2255 University of Arizona 1444
ASTROCHEMISTRY RELATING TO ORIGINS OF SOLAR SYSTEM S
Period Obligations
02/22/1991-04/30/1994 FY94: \$0 TOTAL: \$135,000
Prin. Invest. NASA Tech. Officer CASE Category
J H BLACK HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2291 University of Arizona 1445
ENERGETIC PHENOMENA IN PROTOPLANETARY NEBULAE
Period Obligations
02/26/1991-10/31/1996 FY94: \$47,520 TOTAL: \$179,520
Prin. Invest. NASA Tech. Officer CASE Category
E LEVY HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2301 University of Arizona 1446
THE IDENTIFICATION OF ORDINARY CHONDRITE PARENT BO DIES:
APPLICATIONS OF SPECTRUM
Period Obligations
06/13/1991-12/31/1993 FY94: \$0 TOTAL: \$96,225
Prin. Invest. NASA Tech. Officer CASE Category
L A LEBOSKY HQ/W L QUAIDE 11-Astronomy

NAGW 2315 University of Arizona 1447
NAGW-2315/UNIV ARIZONA/GAS-PLASMA-GRAIN INTERACTIONS
Period Obligations
05/23/1991-12/31/1994 FY94: \$27,000 TOTAL: \$102,000
Prin. Invest. NASA Tech. Officer CASE Category
L L HOOD HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2321 University of Arizona 1448
DOPPLER SHIFT SEARCH FOR PLANETS ORBITING ASTROMETRIC
TARGET STARS
Period Obligations
12/06/1990-04/30/1994 FY94: \$0 TOTAL: \$180,603
Prin. Invest. NASA Tech. Officer CASE Category
R S MCMILLAN HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2342 University of Arizona 1449
NEPTUNE RING/SATELLITE SYSTEM STUDIES: COMBINED ANALYSIS
OF VOYAGER 2 AND GROUND BASED OBSERVATIONS
Period Obligations
03/11/1991-12/31/1994 FY94: \$0 TOTAL: \$139,274
Prin. Invest. NASA Tech. Officer CASE Category
C C PORCO HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2357 University of Arizona 1450
DEVELOPMENT OF LIGHTWEIGHT MIRRORS FOR STRATOSPHERIC
AND SPACE INFRARED AND SUB
Period Obligations
01/29/1991-01/31/1995 FY94: \$115,000 TOTAL: \$411,400
Prin. Invest. NASA Tech. Officer CASE Category
W F HOFFMAN HQ/M D BICAY 13-Physics

NAGW 2359 University of Arizona 1451
SCIENTIFIC PROGRAM IN PLANETARY ATMOSPHERE STUDIES
Period Obligations
03/05/1991-03/31/1994 FY94: \$0 TOTAL: \$224,150
Prin. Invest. NASA Tech. Officer CASE Category
A L BROADFOOT HQ/J BERGSTRALH 11-Astronomy

NAGW 2360 University of Arizona 1452
ANALYSIS OF EUV DAYGLOW SPECTRA OF TRITON, TITAN AND
EARTH
Period Obligations
03/11/1991-12/31/1994 FY94: \$0 TOTAL: \$125,504
Prin. Invest. NASA Tech. Officer CASE Category
R V YELLE HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2425 University of Arizona 1453
UTILIZATION OF EOS DATA IN QUANTIFYING THE PROCESS OF
CONTROLLING THE HYDROLOGIC CYCLE IN ARID REGION
Period Obligations
04/19/1991-12/31/1994 FY94: \$600,000 TOTAL: \$2,001,929
Prin. Invest. NASA Tech. Officer CASE Category
S SOROOSHIAN HQ/G ASRAR 39-Env Sci, NEC
HQ/W S WILSON

NAGW 2441 University of Arizona 1454
NAGW-2441/UNIV ARIZONA/INTERPRETATION OF VOYAGER UVS
OBSERVATIONS AND OCCULTATIONS BY THE ATMOSPHERE
Period Obligations
04/22/1991-12/31/1993 FY94: \$0 TOTAL: \$270,376
Prin. Invest. NASA Tech. Officer CASE Category
B R SANDELL HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2450 University of Arizona 1455
MULTIDIMENSIONAL MODELS OF TYPE I SUPERNOVAE
Period Obligations
04/12/1991-02/28/1995 FY94: \$40,000 TOTAL: \$510,000
Prin. Invest. NASA Tech. Officer CASE Category
D ARNETT HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2493 University of Arizona 1456
NAGW-2493/UNIV ARIZONA/MARS MESOSPHERE THERMOSPHERIC
COUPLING
Period Obligations
08/06/1991-03/31/1996 FY94: \$59,959 TOTAL: \$222,676
Prin. Invest. NASA Tech. Officer CASE Category
S W BOUGHER HQ/J T BERGSTRALH 11-Astronomy

NAGW 2537 University of Arizona 1457
DETERMINATION OF STRATOSPHERIC THERMAL STRUCTURE AND
METHANE ABUNDANCE FROM VOYAGER AND GROUND
Period Obligations
06/13/1991-04/30/1994 FY94: \$0 TOTAL: \$248,534
Prin. Invest. NASA Tech. Officer CASE Category
R V YELLE HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2549 University of Arizona 1458
NAGW-2549/UNIV ARIZONA/THEORY OF COSMIC-RAY DIFFUSION
IN THE HELIOSPHERE
Period Obligations
06/13/1991-08/31/1995 FY94: \$47,500 TOTAL: \$186,898
Prin. Invest. NASA Tech. Officer CASE Category
J KOTA HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 2606 University of Arizona 1459
THE INITIAL MASS FUNCTION AND CLOUD FRAGMENTATION
Period Obligations
07/09/1991-12/31/1994 FY94: \$0 TOTAL: \$148,413
Prin. Invest. NASA Tech. Officer CASE Category
G H RIEKE HQ/J A NUTH 11-Astronomy

NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)

NAGW 3263	University of Arizona	1476
NAGW-3263/UNIV ARIZONA/IMAGE PROCESSING FOR TEACHING		
<i>Period</i>	<i>Obligations</i>	
11/27/1992-07/31/1993	FY94: \$0	TOTAL: \$4,800
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J B HOLBERG	HQ/L LAPIANA	11-Astronomy
	HQ/G P NEWTON	
NAGW 3348	University of Arizona	1477
GEOCHEMICAL EVOLUTION OF THE EARTH		
<i>Period</i>	<i>Obligations</i>	
01/15/1993-12/14/1996	FY94: \$210,616	TOTAL: \$388,224
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M J DRAKE	HQ/H C BRINTON	32-Geological Sci
NAGW 3368	University of Arizona	1478
THE AGGREGATE REPRESENTATION OF TERRESTRIAL LAND C OVERS		
<i>Period</i>	<i>Obligations</i>	
02/02/1993-12/31/1994	FY94: \$151,778	TOTAL: \$277,001
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W J SHUTTLEWORTH	HQ/R E MURPHY	39-Env Sci, NEC
NAGW 3373	University of Arizona	1479
MINERALOGIC AND TRACE ELEMENT STUDIES OF METEORITE S AND METERORITE IMPACTS		
<i>Period</i>	<i>Obligations</i>	
02/10/1993-12/14/1993	FY94: \$243,669	TOTAL: \$415,669
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W BOYNTON	HQ/H C BRINTON	32-Geological Sci
NAGW 3380	University of Arizona	1480
NAGW-3380/B UNIV. ARIZ 'SPACEWATCH UPGRADE AND FOL LOW-UP' , 7/1/93 START		
<i>Period</i>	<i>Obligations</i>	
11/09/1993-12/31/1994	FY94: \$275,961	TOTAL: \$275,961
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T GEHRELS	HQ/J H RAHE	11-Astronomy
NAGW 3382	University of Arizona	1481
MID INFRARED SPECTROSCOPY OF THE MOON MERCURY AND ASTEROIDS		
<i>Period</i>	<i>Obligations</i>	
02/18/1993-01/31/1994	FY94: \$0	TOTAL: \$15,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A L SPRAGUE	HQ/H C BRINTON	11-Astronomy
NAGW 3400	University of Arizona	1482
ORIGIN AND EVOLUTION OF PLANETARY ATMOSPHERE		
<i>Period</i>	<i>Obligations</i>	
03/15/1993-07/31/1997	FY94: \$59,973	TOTAL: \$124,921
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J LEWIS	HQ/H C BRINTON	19-Phys Sci, NEC
NAGW 3406	University of Arizona	1483
PHYSICS OF CIRCUMSTELLAR ACCRETION DISKS		
<i>Period</i>	<i>Obligations</i>	
02/18/1993-02/28/1996	FY94: \$44,797	TOTAL: \$90,487
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W BENZ	HQ/J A NUTH	19-Phys Sci, NEC
NAGW 3410	University of Arizona	1484
ASPECTS OF IMPACT CRATERING ON VENUS		
<i>Period</i>	<i>Obligations</i>	
03/01/1993-02/28/1994	FY94: \$0	TOTAL: \$45,970
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H J MELOSH	HQ/J T BERGSTRAHL	32-Geological Sci
NAGW 3411	University of Arizona	1485
STUDIES IN PLANETARY RINGS		
<i>Period</i>	<i>Obligations</i>	
02/18/1993-12/31/1994	FY94: \$30,000	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C C PORCO	HQ/J M BOYCE	32-Geological Sci
NAGW 3432	University of Arizona	1486
STGCM ANALYSIS OF PIONEER VENUS ORBITER ENTRY DATA		
<i>Period</i>	<i>Obligations</i>	
02/28/1993-03/03/1995	FY94: \$34,632	TOTAL: \$57,605
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S W BOUGHER	HQ/J T BERGSTRAHL	31-Atmos Sci
NAGW 3440	University of Arizona	1487
TOMOGRAPHIC ANALYSIS OF VOYAGER ULTRAVIOLET SPECTR OMETER OBSERVATIONS OF THE IO PLASMA TORUS		
<i>Period</i>	<i>Obligations</i>	
03/15/1993-12/31/1994	FY94: \$54,500	TOTAL: \$109,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F HERBERT	HQ/E C WHIPPLE	13-Physics
NAGW 3515	University of Arizona	1488
ORIGIN OF VENUSIAN CHANNELS, VALLEYS, AND RELATED PHENOMENA		
<i>Period</i>	<i>Obligations</i>	
04/09/1993-03/31/1995	FY94: \$43,200	TOTAL: \$103,200
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V R BAKER	HQ/J T BERGSTRAHL	32-Geological Sci
NAGW 3543	University of Arizona	1489
NAGW-3543/UNIV ARIZONA/SEAWIFS CALIBRATION AND ALG ORTHM VALIDATION		
<i>Period</i>	<i>Obligations</i>	
04/21/1993-12/31/1995	FY94: \$120,000	TOTAL: \$184,079
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P N SLATER	HQ/D E WICKLAND	33-Oceanography
	HQ/A C JANETOS	
NAGW 3555	University of Arizona	1490
EXTRACTION OF SOIL AND VEGETATION PARAMETERS FROM HIGH RESOLUTION BI-DIRECTIONAL REFLEXTANCE SPECTRA		
<i>Period</i>	<i>Obligations</i>	
04/30/1993-05/31/1996	FY94: \$42,318	TOTAL: \$85,848
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A R HUETE	HQ/D E WICKLAND	39-Env Sci, NEC
	HQ/A C JANETOS	
NAGW 3562	University of Arizona	1491
IMPACT MELT PRODUCTION ON VENUS		
<i>Period</i>	<i>Obligations</i>	
05/13/1993-03/31/1994	FY94: \$0	TOTAL: \$35,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A M VICKERY	HQ/J T BERGSTRAHL	32-Geological Sci

NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)

NAGW 3611 University of Arizona 1492
 NOBLE GAS STUDIES OF EARLY SOLAR SYSTEM HISTORY
Period Obligations
 05/21/1993-05/31/1995 FY94: \$39,462 TOTAL: \$65,212
Prin. Invest. NASA Tech. Officer CASE Category
 T SWINDLE HQ/J BOYCE 32-Geological Sci

NAGW 3614 University of Arizona 1493
 COSMOGENIC ¹⁴C IN ANTARCTIC AND NON-ANTARCTIC METEORITES AND LUNAR SAMPLES
Period Obligations
 05/24/1993-05/31/1995 FY94: \$33,268 TOTAL: \$68,287
Prin. Invest. NASA Tech. Officer CASE Category
 A J JULL HQ/J M BOYCE 32-Geological Sci

NAGW 3631 University of Arizona 1494
 ANALYSIS OF VOYAGER OCCULTATION MEASUREMENTS OF THE ATMOSPHERES OF TITAN AND TRITON
Period Obligations
 05/28/1993-04/30/1994 FY94: \$0 TOTAL: \$9,381
Prin. Invest. NASA Tech. Officer CASE Category
 R V YELLE HQ/J T BERGSTRALH 19-Phys Sci, NEC

NAGW 3635 University of Arizona 1495
 MISSION OF OPPORTUNITY: IN SITU MEASUREMENTS OF ENERGY NEUTRAL ATOMS
Period Obligations
 06/16/1993-03/31/1995 FY94: \$57,265 TOTAL: \$97,149
Prin. Invest. NASA Tech. Officer CASE Category
 C CURTIS HQ/E C WHIPPLE 13-Physics
 HQ/J D BOHLIN

NAGW 3638 University of Arizona 1496
 CATION ORDERING AND COMPOSITIONAL ZONING IN METEORITIC OTHOPYROXENES: IMPLICATIONS FOR COOLING RATE
Period Obligations
 07/05/1993-01/31/1996 FY94: \$36,205 TOTAL: \$74,315
Prin. Invest. NASA Tech. Officer CASE Category
 J GANGULY HQ/J M BOYCE 32-Geological Sci

NAGW 3657 University of Arizona 1497
 THE VOYAGER ULTRAVIOLET SPECTROMETER EXPERIMENT THROUGH THE VOYAGER INTERSTELLAR MISSION
Period Obligations
 06/16/1993-09/30/1995 FY94: \$323,000 TOTAL: \$483,000
Prin. Invest. NASA Tech. Officer CASE Category
 A BROADFOOT HQ/W V JONES 13-Physics
 HQ/J D BOHLIN

NAGW 3694 University of Arizona 1498
 NAGW-3694/B UNIV AZ 'MARS SURFACE CHEMISTRY' 6/1/93 START
Period Obligations
 11/18/1993-05/31/1994 FY94: \$12,367 TOTAL: \$12,367
Prin. Invest. NASA Tech. Officer CASE Category
 W BOYNTON HQ/N 32-Geological Sci

NAGW 3705 University of Arizona 1499
 IMPACT CRATER INVESTIGATIONS OF VENUS
Period Obligations
 08/11/1993-03/14/1995 FY94: \$20,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 R G STROM HQ/J T BERGSTRALH 32-Geological Sci

NAGW 3717 University of Arizona 1500
 DEVELOPMENT OF GAMMA-RAY SPECTROMETERS FOR REMOTE-SENSING AND IN-SITU ANALYSES
Period Obligations
 08/26/1993-05/31/1995 FY94: \$9,999 TOTAL: \$34,983
Prin. Invest. NASA Tech. Officer CASE Category
 W V BOYNTON HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3796 University of Arizona 1501
 PLUTO AND CHARON
Period Obligations
 10/13/1993-08/31/1994 FY94: \$35,099 TOTAL: \$35,099
Prin. Invest. NASA Tech. Officer CASE Category
 T GEHRELS HQ/RAHE 11-Astronomy

NAGW 3820 University of Arizona 1502
 NAGW-3820/UNIV ARIZONA; OBSERVATIONS OF INNER BELT C, E, AND M CLASS ASTEROIDS
Period Obligations
 11/24/1993-12/31/1994 FY94: \$29,991 TOTAL: \$29,991
Prin. Invest. NASA Tech. Officer CASE Category
 D BRITT HQ/H H BRINTON 11-Astronomy

NAGW 3846 University of Arizona 1503
 UNIV ARIZONA; OPTIMIZING CHARGE-COUPLED DEVICES FOR THE NEAR ULTRAVIOLET
Period Obligations
 01/11/1994-12/31/1994 FY94: \$59,950 TOTAL: \$59,950
Prin. Invest. NASA Tech. Officer CASE Category
 M P LESSER HQ/R V STACHNIK 11-Astronomy
 HQ/E J WEILER

NAGW 3904 University of Arizona 1504
 NUMERICAL STUDIES OF IMPACTS AND COLLISIONS
Period Obligations
 03/23/1994-01/31/1995 FY94: \$49,970 TOTAL: \$49,970
Prin. Invest. NASA Tech. Officer CASE Category
 W BENZ HQ/R WILLIAMS 32-Geological Sci

NAGW 4066 University of Arizona 1505
 CORONAGRAPHIC AND SPECTROGRAPHIC OBSERVATIONS OF P /SHOEMAKER-LEVY 9 IMPACT WITH JUPITER
Period Obligations
 07/26/1994-10/31/1994 FY94: \$62,999 TOTAL: \$62,999
Prin. Invest. NASA Tech. Officer CASE Category
 S LARSON HQ/J H RAHE 11-Astronomy

NAGW 4072 University of Arizona 1506
 CCD IMAGING, PHOTOMETRY, AND SPECTROPHOTOMETRY OF COMET 1993E COLLISION WITH JUPITER
Period Obligations
 08/12/1994-12/31/1994 FY94: \$31,000 TOTAL: \$31,000
Prin. Invest. NASA Tech. Officer CASE Category
 W HUBBARD HQ/J RAHE 11-Astronomy

NAGW 4074 University of Arizona 1507
 SILICON MICROMACHINING OF SUBMILLIMETER WAVEGUIDE STRUCTURES
Period Obligations
 07/15/1994-12/31/1994 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 C K WALKER HQ/L J CAROFF 11-Astronomy

NASA'S UNIVERSITY PROGRAM **ARIZONA (Continued)**

NAGW 4083 University of Arizona 1508
 LOW MASS STARS AND BROWN DWARFS: FORMATION AND TEST OF ATMOSPHERIC MODELS
Period *Obligations*
 07/15/1994-06/30/1995 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest. *NASA Tech. Officer*
 G RIEKE HQ/P ROGERS CASE Category
 11-Astronomy

NAS 5-31289 University of Arizona 1516
 DEVELOPMENT OF THE HST SECOND GENERATION INSTRUMENT TITLED NICMOS
Period *Obligations*
 12/20/1990-09/30/1997 FY94: \$36,639,164 TOTAL: \$54,313,164
Prin. Invest. *NASA Tech. Officer* CASE Category
 R L THOMPSON GSFC/M M JURUTICH 41-Aero Engr

NAGW 4126 University of Arizona 1509
 ASTROCHEMISTRY RELATING TO THE ORIGINS OF THE SOLAR SYSTEM
Period *Obligations*
 09/02/1994-05/31/1995 FY94: \$14,942 TOTAL: \$14,942
Prin. Invest. *NASA Tech. Officer* CASE Category
 J H BLACK HQ/P ROGERS 12-Chemistry

NAS 5-31364 University of Arizona 1517
 EOS/MODIS INVESTIGATION FROM DR. HUETE
Period *Obligations*
 01/24/1992-12/14/2001 FY94: \$305,000 TOTAL: \$699,609
Prin. Invest. *NASA Tech. Officer* CASE Category
 A HUETE GSFC/H OSEROFF 31-Atmos Sci

NAG10-92 University of Arizona 1510
 LIGHTNING FIELD CHANGES AND DISPLACEMENT—CURRENTS AT KSC
Period *Obligations*
 08/12/1991-06/30/1995 FY94: \$1,600 TOTAL: \$101,600
Prin. Invest. *NASA Tech. Officer* CASE Category
 E P KRIDER KSC/W JAFFERIS 31-Atmos Sci

NAS 5-31717 University of Arizona 1518
 EOS INVESTIGATION
Period *Obligations*
 01/03/1994-03/02/1995 FY94: \$990,000 TOTAL: \$2,301,000
Prin. Invest. *NASA Tech. Officer* CASE Category
 P N SLATER GSFC/L STUART 31-Atmos Sci

NAG10-134 University of Arizona 1511
 EFFECT OF MICROGRAVITY ON TOBACCO HORNWORM (MANAUCASEXTA) DURING METAMORPHOSIS
Period *Obligations*
 05/02/1994-10/01/1995 FY94: \$114,985 TOTAL: \$114,985
Prin. Invest. *NASA Tech. Officer* CASE Category
 M T TISCHLER KSC/W M KNOTT 51-Biological Sci

NAS 5-32495 University of Arizona 1519
 CREATE IRAS DEEP SKY CATALOG OF ASTEROIDS AND COMETS
Period *Obligations*
 03/03/1994-03/02/1995 FY94: \$26,797 TOTAL: \$26,797
Prin. Invest. *NASA Tech. Officer* CASE Category
 M V SYKES GSFC/D K WEST 11-Astronomy

NAS 1-18939 University of Arizona 1512
 SAGE III SCIENCE INVESTIGATION SUPPORT - P.I. - B. HERMAN
Period *Obligations*
 02/28/1990-01/31/1995 FY94: \$45,000 TOTAL: \$121,500
Prin. Invest. *NASA Tech. Officer* CASE Category
 B M HERMAN LARC/G L MADDREA JR 31-Atmos Sci
 LARC/L R MCMASTER

NAS 9-18433 University of Arizona 1520
 FLIGHT RELATED STUDIES/ENHANCED HYBRIDOMA PRODUCTION UNDER MICROGRAVITY
Period *Obligations*
 04/15/1991-05/01/1994 FY94: \$0 TOTAL: \$984,801
Prin. Invest. *NASA Tech. Officer* CASE Category
 D W SAMMONS JSC/S R GONDA 51-Biological Sci
 G A NEIL

NAS 1-19953 University of Arizona 1513
 SCIENCE SUPPORT TO THE LIFE SCIENCE TEAM
Period *Obligations*
 05/24/1993-05/23/1996 FY94: \$60,000 TOTAL: \$85,000
Prin. Invest. *NASA Tech. Officer* CASE Category
 J A REAGAN LARC/G L MADDREA 31-Atmos Sci

NCA 2-537 University of Arizona 1521
 A COMPARISON OF PLANT GROWTH AND YIELD IN HYDROPONIC CULTURE VS. SOLID MEDIA TECHNIQUES FOR
Period *Obligations*
 06/20/1990-12/31/1992 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* CASE Category
 M H JENSEN ARC/D L BUBENHEIM 56-Medical Sciences

NAS 2-13464 University of Arizona 1514
 SERVICES TO SUPPORT THE OPERATION AND MAINTENANCE OF THE NASA 1.5 METER TELESCOPE AT MT LEMMON, AZ
Period *Obligations*
 10/29/1991-07/31/1995 FY94: \$143,317 TOTAL: \$562,069
Prin. Invest. *NASA Tech. Officer* CASE Category
 M RIEKE ARC/C D LAUGHLIN 11-Astronomy

NCA 2-783 University of Arizona 1522
 AN EXAMINATION OF CREW MANAGEMENT, COORDINATION, AND WORK ROLES
Period *Obligations*
 02/04/1993-03/15/1994 FY94: \$0 TOTAL: \$17,057
Prin. Invest. *NASA Tech. Officer* CASE Category
 S CONLEY ARC/B KANKI 62-Social Aspects

NAS 5-30124 University of Arizona 1515
 SCIENTIFIC INTERPRETATION OF GPMS DATA
Period *Obligations*
 08/10/1987-04/30/1997 FY94: \$100,000 TOTAL: \$182,000
Prin. Invest. *NASA Tech. Officer* CASE Category
 D HUNTEN GSFC/J R RICHARDS 31-Atmos Sci

NCA 2-822 University of Arizona 1523
 ATMOSPHERIC EFFECTS OF GIANT IMPACTS
Period *Obligations*
 06/03/1993-12/31/1993 FY94: \$0 TOTAL: \$10,390
Prin. Invest. *NASA Tech. Officer* CASE Category
 H J MELOSH ARC/J B POLLACK 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)**

NCC 2-329 University of Arizona 1524
ANALYSIS OF TURBULENCE ENCOUNTERS USING AIRLINE DIGITAL FLIGHT RECORDS
Period *Obligations*
01/01/1985-02/28/1994 FY94: \$0 TOTAL: \$144,956
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E K PARKS ARC/R E BACH 41-Aero Engr
ARC

NCC 2-667 University of Arizona 1525
CALIBRATION OF GAAS PHOTOMULTIPLIER TUBES FOR STANDARDIZATION OF THE SSPM DETECTOR
Period *Obligations*
04/26/1990-11/30/1994 FY94: \$3,001 TOTAL: \$14,945
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R S MCMILLAN ARC/J H GOEBEL 11-Astronomy
J H GOEBEL ARC/C R MCCREIGHT

NCC 2-5051 University of Arizona 1526
THE TRAPPING OF NOBLE GASES IN INTERSTELLAR ICE RESIDUES
Period *Obligations*
05/06/1994-12/15/1994 FY94: \$8,970 TOTAL: \$8,970
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T D SWINDLE ARC/S A SANDFORD 11-Astronomy

NCC 5-77 University of Arizona 1527
INVEST. OF SIGNAL AND IMAGING PROCESSING TECHNIQUE FOR CLOUD DETECTION BY MICRO PULSE LIDARS
Period *Obligations*
08/01/1994-07/31/1995 FY94: \$21,881 TOTAL: \$21,881
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A REAGAN GSFC/J D SPINHIRNE 31-Atmos Sci
GSFC/V S SCOTT

NGT 00-010-001 University of Arizona 1528
ASTRONOMY PRE-SERVICE FOR FUTURE ELEMENTARY SCHOOL TEACHERS
Period *Obligations*
06/04/1993-03/31/1994 FY94: \$0 TOTAL: \$82,575
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A LEBOSKY HQ/D V GALLAWAY 11-Astronomy

NGT 00-010-020 University of Arizona 1529
NGT-10020/UNIV ARIZONA/MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP PROGRAM
Period *Obligations*
12/01/1993-03/31/1994 FY94: \$49,854 TOTAL: \$49,854
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K RAMOHALLI HQ/G S SEIDEL 41-Aero Engr
HQ/J R FACEY

NGT 00-030-021 University of Arizona 1530
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/17/1990-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C L GROTBEC HQ/G ASRAR 31-Atmos Sci

NGT 00-030-045 University of Arizona 1531
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/23/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
X GAO HQ/D M BUTLER 39-Env Sci, NEC
S SOROOSHIAN HQ/G S WILSON

NGT 00-030-136 University of Arizona 1532
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/21/1992-08/31/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P R HOUSER HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-173 University of Arizona 1533
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/24/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C V HAYNES, J.R. HQ/G ASRAR 32-Geological Sci
HQ/D M BUTLER

NGT 00-030-181 University of Arizona 1534
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/27/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J RANGER-MOORE HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-215 University of Arizona 1535
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/24/1993-08/31/1995 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A REAGAN HQ/G ASRAR 99-Multi-Discip
HQ/D M BUTLER

NGT 00-040-006 University of Arizona 1536
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
11/29/1989-01/31/1995 FY94: \$381,095 TOTAL: \$1,869,091
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E LEVY HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-582 University of Arizona 1537
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/24/1990-10/31/1993 FY94: \$0 TOTAL: \$63,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R NARAYAN HQ/F C OWENS 11-Astronomy

NGT 00-050-612 University of Arizona 1538
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/09/1990-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J DRAKE HQ/F C OWENS 32-Geological Sci

NGT 00-050-626 University of Arizona 1539
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/24/1990-12/31/1993 FY94: \$0 TOTAL: \$64,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S SOROOSHIAN HQ/F C OWENS 13-Physics

**NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)**

NGT 00-050-861				University of Arizona	1540
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
07/25/1990-08/14/1993	FY94: \$0	TOTAL: \$66,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
U FINK	HQ/F C OWENS	13-Physics			
NGT 00-050-862				University of Arizona	1541
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
08/07/1990-08/14/1993	FY94: \$0	TOTAL: \$66,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
V R BAKER	HQ/F C OWENS	32-Geological Sci			
NGT 00-050-704				University of Arizona	1542
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
08/15/1991-08/31/1995	FY94: \$11,000	TOTAL: \$77,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
J A REAGAN	HQ/F C OWENS	45-Elec Engr			
NGT 00-050-737				University of Arizona	1543
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
06/25/1991-08/04/1994	FY94: \$0	TOTAL: \$66,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
B FABES	HQ/F C OWENS	47-Materials Engr			
NGT 00-050-758				University of Arizona	1544
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
11/26/1991-08/14/1995	FY94: \$22,000	TOTAL: \$88,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
R GREEN	GSFC/G SOFFEN	11-Astronomy			
NGT 00-050-782				University of Arizona	1545
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
06/25/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
H P LARSON	HQ/F C OWENS	31-Atmos Sci			
NGT 00-050-796				University of Arizona	1546
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
06/10/1991-06/30/1993	FY94: \$0	TOTAL: \$44,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
H J MELOSH	HQ/F C OWENS	11-Astronomy			
NGT 00-050-857				University of Arizona	1547
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
07/15/1991-03/31/1995	FY94: \$0	TOTAL: \$65,712			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
M RIEKE	HQ/F C OWENS	11-Astronomy			
NGT 00-050-920				University of Arizona	1548
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
07/14/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
P N SLATER	HQ/J ALEXANDER	45-Elec Engr			
NGT 00-050-962				University of Arizona	1549
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
06/26/1992-07/31/1995	FY94: \$22,000	TOTAL: \$66,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
B SANDEL	HQ/J ALEXANDER	11-Astronomy			
NGT 00-050-966				University of Arizona	1550
NASA GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
06/26/1992-08/24/1994	FY94: \$6,411	TOTAL: \$50,411			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
R D SCHLICHTING	HQ/P HUNTER	22-Computer Science			
NGT 00-051-092				University of Arizona	1551
GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
06/01/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
C M TIPTON	HQ/R WHITE	59-Life Sci, NEC			
NGT 00-051-111				University of Arizona	1552
GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
09/02/1993-07/31/1994	FY94: \$16,000	TOTAL: \$22,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
J REAGAN	LARC/E J PRIOR	45-Elec Engr			
NGT 00-051-122				University of Arizona	1553
GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
06/02/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
J C BAYGENTS	HQ/D A HOLLAND	21-Mathematics			
NGT 00-051-127				University of Arizona	1554
GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
06/23/1993-08/14/1996	FY94: \$22,000	TOTAL: \$44,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
J I LUNINE	HQ/D HOLLAND	11-Astronomy			
NGT 00-051-139				University of Arizona	1555
GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
07/25/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
E H LEVY	HQ/D HOLLAND	11-Astronomy			
NGT 00-051-152				University of Arizona	1556
GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
08/03/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
C D IMPEY	HQ/D HOLLAND	11-Astronomy			
NGT 00-051-210				University of Arizona	1557
GRADUATE STUDENT RESEARCHERS PROGRAM					
<i>Period</i>		<i>Obligations</i>			
08/16/1994-08/14/1997	FY94: \$22,000	TOTAL: \$22,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
R D SCHRIMPF	GSFC/G SOFFEN	45-Elec Engr			
K F GALLOWAY					

**NASA'S UNIVERSITY PROGRAM
ARIZONA (Continued)**

NGT 00-051-219 University of Arizona 1558
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
P N SLATER HQ/A NOVOTNY 31-Atmos Sci

NGT 00-051-289 University of Arizona 1559
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/28/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
W A BOYNTON HQ/D HOLLAND 11-Astronomy

NGT 00-051-304 University of Arizona 1560
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/28/1994-07/09/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
F MELIA HQ/D HOLLAND 13-Physics

NGT 00-051-305 University of Arizona 1561
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/06/1994-07/09/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
F MELIA HQ/D HOLLAND 11-Astronomy

NGT 00-051-306 University of Arizona 1562
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/06/1994-07/09/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
G RIEKE HQ/D HOLLAND 11-Astronomy
F MELIA

NGT 00-051-324 University of Arizona 1563
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/06/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
U FINK HQ/D HOLLAND 11-Astronomy

NGT 00-051-327 University of Arizona 1564
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/19/1994-08/14/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
H J MELOSH HQ/D HOLLAND 11-Astronomy

NGT 00-051-328 University of Arizona 1565
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/19/1994-08/14/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
C WALKER HQ/D HOLLAND 11-Astronomy

NGT 00-051-363 University of Arizona 1566
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
C F CHEN HQ/G A LESANE 46-Mech Engr

NGT 00-070-256 University of Arizona 1567
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
07/08/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
W RASMUSSEN HQ/D K RUSSELL 43-Chem Engr

NGT 00-070-403 University of Arizona 1568
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
09/29/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
A ORTEGA HQ/D K RUSSELL 46-Mech Engr

ARKANSAS

NAG 9-635 Arkansas College 1569
REDUCTION OF SIMULATED LUNAR SOIL USING CARBON
Period Obligations
08/24/1992-08/31/1993 FY94: \$0 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
R BUSTIN JSC/S H GOLDSTEIN 32-Geological Sci

NAG 8-277 Arkansas State University 1570
JOVE
Period Obligations
12/30/1992-05/31/1995 FY94: \$36,517 TOTAL: \$111,487
Prin. Invest. NASA Tech. Officer CASE Category
B BENNETT MSFC/F SIX 19-Phys Sci, NEC
A SUSTICH

NAG13-30 Arkansas State University 1571
RESEARCH/EVALUATION OF PARAMETERS INVOLVED CONDUCT
IVE/RESISTIVE TRACES ON FLEXABLE SUBSTRATE
Period Obligations
04/19/1994-08/31/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
P SHERMAN SSC/W ST. CYR 54-Env Biology

NAG 8-197 Harding University 1572
A NASA/HARDING UNIVERSITY JOINT VENTURE IN SPACE
SCIENCE
Period Obligations
04/29/1991-04/08/1995 FY94: \$0 TOTAL: \$89,000
Prin. Invest. NASA Tech. Officer CASE Category
J MACKEY MSFC/N F SIX 11-Astronomy

NAG 9-81 University of Arkansas - Fayetteville 1573
CHEMICAL + PHYSICAL STUDIES TYPE 3 CHOND
Period Obligations
03/01/1994-09/01/1994 FY94: \$0 TOTAL: \$558,499
Prin. Invest. NASA Tech. Officer CASE Category
D W SEARS JSC/I D BROWNE 32-Geological Sci

NAGW 3479 University of Arkansas - Fayetteville 1574
NATURAL THERMOLUMINESCENCE OF ANTARCTIC METEORITES
AND RELATED STUDIES
Period Obligations
03/27/1993-02/28/1994 FY94: \$0 TOTAL: \$23,175
Prin. Invest. NASA Tech. Officer CASE Category
D SEARS HQ/H C BRINTON 32-Geological Sci

NASA'S UNIVERSITY PROGRAM **ARKANSAS (Continued)**

NAGW 3519 University of Arkansas - Fayetteville 1575
CHEMICAL AND PHYSICAL STUDIES OF EXTRATERRESTRIAL MATERIALS
Period *Obligations*
04/09/1993-02/28/1994 FY94: \$0 TOTAL: \$60,770
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D SEARS HQ/H C BRINTON 32-Geological Sci

NAGW 4117 University of Arkansas - Fayetteville 1576
PILOT PROGRAM FOR THE DEVELOPMENT OF CLASSIFICATION AND ACCURACY ASSESSMENT METHODS FOR LANDSAT AND GI
Period *Obligations*
08/16/1994-06/30/1995 FY94: \$129,042 TOTAL: \$129,042
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W F LIMP HQ/J J GAREGNANI 29-Math/Computer, NEC
HQ/A J TUYAHOV

NCC 2-5026 University of Arkansas - Fayetteville 1577
THRESHOLD CONCENTRATIONS OF MOLECULAR HYDROGEN ALL OWING FOR GROWTH OF METHANOGENIC BACTERIA
Period *Obligations*
01/14/1994-01/31/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A KRAL ARC/C P MCKAY 51-Biological Sci

NAG 8-276 University of Arkansas - Little Rock 1578
JOVE
Period *Obligations*
01/15/1993-06/30/1995 FY94: \$28,500 TOTAL: \$87,021
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T VISWANATHAN MSFC/F SIX 19-Phys Sci, NEC
D C WOLD

NAG13-26 University of Arkansas - Little Rock 1579
SPECTROSCOPIC CHARACTERIZATION OF HYBRID ROCKET PLUMES
Period *Obligations*
05/17/1993-11/17/1994 FY94: \$4,903 TOTAL: \$24,877
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K HUDSON SSC/W W ST. CYR 13-Physics

NAG13-31 University of Arkansas - Little Rock 1580
RESEARCH ENTITLED 'HYBRID ROCKET MOTOR IR MONITORING
Period *Obligations*
06/16/1994-12/31/1994 FY94: \$9,965 TOTAL: \$9,965
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K HUDSON SSC/ST.CYR 41-Aero Engr

NCCW 55 University of Arkansas - Little Rock 1581
THE ARKANSAS PLAN FOR ENCHANCEMENT OF AEROSPACE AND ECONOMIC DEVELOPMENT
Period *Obligations*
08/18/1994-04/30/1997 FY94: \$500,000 TOTAL: \$500,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G NORTHROP HQ/A S MCGEE 99-Multi-Discip

NGT 00-040-036 University of Arkansas - Little Rock 1582
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
04/17/1991-02/28/1995 FY94: \$170,000 TOTAL: \$663,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G M NORTHROP HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-886 University of Arkansas - Little Rock 1583
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/15/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M K HUDSON SSC/A JOYCE 45-Elec Engr

NGT 00-051-013 University of Arkansas - Little Rock 1584
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/06/1992-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M K HUDSON SSC/A JOYCE 45-Elec Engr

NGT 00-051-216 University of Arkansas - Little Rock 1585
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/19/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M K HUDSON SSC/A JOYCE 45-Elec Engr

CALIFORNIA

NAG 1-1203 California Institute of Technology 1586
CONSTITUTIVE BEHAVIOR RELEVANT TO TOUGH MATRIX MATERIALS AND MECHANICS OF COMPOSITES
Period *Obligations*
12/21/1990-09/30/1994 FY94: \$84,000 TOTAL: \$385,458
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W G KNAUSS LARC/T S GATES 41-Aero Engr

NAG 1-1209 California Institute of Technology 1587
RESEARCH ON SCRAM-JET COMBUSTORS
Period *Obligations*
02/13/1991-01/31/1995 FY94: \$104,661 TOTAL: \$520,821
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H G HORNUNG LARC/R C ROGERS 41-Aero Engr
LARC/G Y ANDERSON

NAG 2-732 California Institute of Technology 1588
PREPARATION OF SOFTWARE TO ACCOMPANY A MONOGRAPH-INTRODUCTION TO AIRFOIL THEORY
Period *Obligations*
09/04/1991-12/31/1994 FY94: \$0 TOTAL: \$25,839
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F E CULICK ARC/R M HICKS 41-Aero Engr

NAG 2-744 California Institute of Technology 1589
SUBMILLIMETER SPECTROSCOPY WITH A 500-100 GHZ SIS RECEIVER
Period *Obligations*
12/03/1991-09/30/1994 FY94: \$0 TOTAL: \$517,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J ZMUIDZINAS ARC/C D LAUGHLIN 11-Astronomy
ARC/C M GILLESPIE

NAG 2-792 California Institute of Technology 1590
ROBUST NONLINEAR CONTROL OF VECTORED THRUST AIRCRAFT
Period *Obligations*
07/31/1992-05/31/1995 FY94: \$60,900 TOTAL: \$173,185
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C DOYLE ARC/M J BRENNER 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 2-857 California Institute of Technology 1591
CII 158 UM OBSERVATIONS OF THE Z=2.86 IRAS SOURC E
FSC10214+4724
Period *Obligations*
08/13/1993-08/31/1994 FY94: \$0 TOTAL: \$33,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B T SOIFER ARC/C D LAUGHLIN 11-Astronomy
J ZMUIDZINES ARC/C M GILLESPIE

NAG 5-727 California Institute of Technology 1592
RESEARCH RELATIVE TO THE CALTECH/IISOTAPE
SPECTROMETER-IMP
Period *Obligations*
12/22/1985-09/30/1995 FY94: \$65,153 TOTAL: \$500,254
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E C STONE GSFC/G BULLOCK 31-Atmos Sci
R A MELWALDT

NAG 5-1458 California Institute of Technology 1593
LOW-ENERGY GAMMA-RAY EMISSION GALAXIC OBJECTS
Period *Obligations*
08/23/1990-12/31/1994 FY94: \$178,811 TOTAL: \$465,811
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A PRINCE GSFC/J P NORRIS 11-Astronomy
J M GRUNSFELD GSFC/D A KNIFFEN
P W GORHAM

NAG 5-1583 California Institute of Technology 1594
NEUTRON STARS-SUPERNOVA REMNANTS: AN INTEGRATED A
PPROACH
Period *Obligations*
05/24/1991-06/14/1994 FY94: \$0 TOTAL: \$88,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S R KULKARNI GSFC/R PETRE 11-Astronomy

NAG 5-1611 California Institute of Technology 1595
EXTENSION OF THE WIDE FIELD I PLANETARY CAMERA POS
T-LAUNCH SCIENCE AND ENGINEERING ACTIVITIES
Period *Obligations*
05/23/1991-10/31/1994 FY94: \$2,550,180 TOTAL: \$8,905,480
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A WESTPHAL GSFC/S SOBIESKI 11-Astronomy

NAG 5-1687 California Institute of Technology 1596
PRECISE DETERMINATION OF THE S-RAY/GAMMA-RAY SOURC E,
PULSARS AND NEUTRON STARS IN THE GLOBULAR CLUS
Period *Obligations*
07/15/1991-07/14/1994 FY94: \$0 TOTAL: \$61,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A PRINCE GSFC/R PETRE 11-Astronomy

NAG 5-1707 California Institute of Technology 1597
THE NEAREST AND LEAST LUMINOUS SEYFERT 1 NUCLEUS
Period *Obligations*
07/15/1991-01/14/1995 FY94: \$0 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W L SARGENT GSFC/R PETRE 11-Astronomy

NAG 5-1710 California Institute of Technology 1598
A SEARCH FOR EVOLUTION OF INFRARED BRIGHT GALAXIES
Period *Obligations*
08/01/1991-07/31/1993 FY94: \$0 TOTAL: \$48,138
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G NEUGEBAUER GSFC/D WEST 11-Astronomy

NAG 5-1861 California Institute of Technology 1599
ROSAT HRI OBSERVATIONS OF THE MRK 266 SUPERWIND
Period *Obligations*
01/22/1992-01/31/1994 FY94: \$0 TOTAL: \$28,336
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T M HECKMAN GSFC/R PETRE 11-Astronomy

NAG 5-1934 California Institute of Technology 1600
X-RAY EMISSION FROM COMPACT STEEP-SPECTRUM QUASARS
(569)
Period *Obligations*
03/12/1992-09/14/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J PEARSON GSFC/R PETRE 11-Astronomy

NAG 5-1985 California Institute of Technology 1601
THE X-RAY LUMINOSITY OF LOW MASS HYADES STARS
Period *Obligations*
05/28/1992-05/31/1994 FY94: \$0 TOTAL: \$37,265
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I N REID GSFC/R PETRE 11-Astronomy

NAG 5-2008 California Institute of Technology 1602
CORRELATIVE STUDIES OF THE HARD X-RAY AND OPTICAL/ IR
PROPERTIES OF BE/X-RAY BINARY PULSARS
Period *Obligations*
07/15/1992-07/31/1993 FY94: \$0 TOTAL: \$9,780
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M GRUNSFELD GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2090 California Institute of Technology 1603
CORRELATIVE STUDIES OF SOLAR FLARES
Period *Obligations*
09/02/1992-09/14/1995 FY94: \$101,938 TOTAL: \$152,334
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H ZIRIN GSFC/J P NORRIS 11-Astronomy
H WANG GSFC/N WHITE

NAG 5-2167 California Institute of Technology 1604
VARIABILITY OF INVERSE-COMPTON EMISSION FROM THE Q UASAR
3C 345
Period *Obligations*
12/31/1992-12/31/1993 FY94: \$0 TOTAL: \$17,888
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S C UNWIN GSFC/R PETRE 11-Astronomy

NAG 5-2168 California Institute of Technology 1605
STUDIES OF A FREE-FLYING ASTROMAG MISSION
Period *Obligations*
12/31/1992-12/31/1993 FY94: \$0 TOTAL: \$19,516
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A MEWOLDT GSFC/R STRICTMATTER 11-Astronomy

NAG 5-2177 California Institute of Technology 1606
ELECTRON HEATING AND ACCELERATION IN TWO YOUNG SUP
ERNOVA REMNANTS: G11.2-0.3 AND 3C397
Period *Obligations*
01/11/1993-01/14/1994 FY94: \$0 TOTAL: \$6,136
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R D BLANDFORD GSFC/R PETRE 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 5-2184 California Institute of Technology 1607
PARTICIPATION IN THE MARS OBSERVER LASER ALTIMETER (MOLA)
TEAM

Period	Obligations	
02/09/1993-02/14/1994	FY94: \$0	TOTAL: \$59,750
Prin. Invest.	NASA Tech. Officer	CASE Category
D O MUHLEMAN	GSFC/D E SMITH	11-Astronomy

NAG 5-2193 California Institute of Technology 1608
ROSAT DEEP SURVEY III

Period	Obligations	
02/04/1993-02/14/1995	FY94: \$19,000	TOTAL: \$25,667
Prin. Invest.	NASA Tech. Officer	CASE Category
M SCHMIDT	GSFC/R PETRE	11-Astronomy

NAG 5-2381 California Institute of Technology 1609
IRAS FILLER-MODE POINTED OBSERVATIONS APPLIED TO THE
EVOLUTION OF GALAXIES

Period	Obligations	
09/23/1993-09/30/1994	FY94: \$21,000	TOTAL: \$21,000
Prin. Invest.	NASA Tech. Officer	CASE Category
G NEUGEBAUER	GSFC/D WEST	11-Astronomy

NAG 5-2450 California Institute of Technology 1610
A NEW CLASS OF SOFT X-RAY SOURCE MAGNETIC BP STARS

Period	Obligations	
02/02/1994-02/14/1995	FY94: \$4,500	TOTAL: \$4,500
Prin. Invest.	NASA Tech. Officer	CASE Category
J LIM	GSFC/R PETRE	11-Astronomy

NAG 5-2496 California Institute of Technology 1611
COMPLETION OF THE P G QUASARS SOFT X-RAY SURVEY

Period	Obligations	
01/27/1994-01/31/1995	FY94: \$32,000	TOTAL: \$32,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A LAOR	GSFC/R PETRE	11-Astronomy

NAG 5-2504 California Institute of Technology 1612
INVESTIGATION OF HIGH ENERGY GAMMA RAY EMISSION FROM
AGN'S. A DEEP EXPOSURE AT HIGH

Period	Obligations	
02/16/1994-02/28/1995	FY94: \$22,396	TOTAL: \$22,396
Prin. Invest.	NASA Tech. Officer	CASE Category
R BLANDFORD	GSFC/J P NORRIS	11-Astronomy
C E FICHEL	GSFC/N WHITE	

NAG 5-2519 California Institute of Technology 1613
PROBING THE RELATIVISTIC WIND OF A MILLISECOND PULSAR

Period	Obligations	
02/21/1994-09/14/1995	FY94: \$8,000	TOTAL: \$8,000
Prin. Invest.	NASA Tech. Officer	CASE Category
B R KULKARNI	GSFC/N WHITE	11-Astronomy

NAG 5-2520 California Institute of Technology 1614
ASCA OBSERVATIONS OF THE UNUSUAL BINARY LSI + 61 3 03

Period	Obligations	
02/21/1994-03/14/1995	FY94: \$7,861	TOTAL: \$7,861
Prin. Invest.	NASA Tech. Officer	CASE Category
T A PRINCE	GSFC/N WHITE	11-Astronomy

NAG 5-2655 California Institute of Technology 1615
A ROSAT DEEP GALACTIC SURVEY

Period	Obligations	
07/21/1994-07/31/1995	FY94: \$28,700	TOTAL: \$28,700
Prin. Invest.	NASA Tech. Officer	CASE Category
S R KULKARNI	GSFC/D WEST	11-Astronomy

NAG 5-2656 California Institute of Technology 1616
HIGH ANGULAR RESOLUTION FAR-INFRARED AND SUBMILLI-METER
MAPPING SURVEY OF THE DUS

Period	Obligations	
07/21/1994-07/31/1995	FY94: \$37,700	TOTAL: \$37,700
Prin. Invest.	NASA Tech. Officer	CASE Category
T G PHILLIPS	GSFC/D WEST	11-Astronomy

NAG 5-2657 California Institute of Technology 1617
THE FAR-INFRARED PROPERTIES OF HIGH REDSHIFT QUASARS
AND GALAXIES OBSERVED BY IR

Period	Obligations	
07/21/1994-07/31/1995	FY94: \$37,000	TOTAL: \$37,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L ARMUS	GSFC/D WEST	11-Astronomy

NAG 5-2666 California Institute of Technology 1618
THEORY AND OBSERVATION OF ACCRETING GALACTIC SOURCES

Period	Obligations	
07/27/1994-07/31/1995	FY94: \$30,232	TOTAL: \$30,232
Prin. Invest.	NASA Tech. Officer	CASE Category
L BILDSTEN	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2674 California Institute of Technology 1619
ROSAT INVESTIGATIONS OF COMPACT GROUPS AND THE
GIOVANELLI-HAYNES OBJECT

Period	Obligations	
09/15/1994-09/14/1995	FY94: \$15,042	TOTAL: \$15,042
Prin. Invest.	NASA Tech. Officer	CASE Category
T HANUTTON	GSFC/R PETRE	11-Astronomy

NAG 8-937 California Institute of Technology 1620
ROTOR FORCE TIP LEAKAGE PHENOMENA

Period	Obligations	
09/25/1992-06/24/1993	FY94: \$0	TOTAL: \$79,982
Prin. Invest.	NASA Tech. Officer	CASE Category
C E BRENNEN	MSFC/H P STINSON	46-Mech Engr
A J ACOSTA	MSFC/J L CANNON	
T K CAUGHEY		

NAG 8-954 California Institute of Technology 1621
METALLIC GLASS RESEARCH IN SPACE

Period	Obligations	
06/07/1993-01/31/1995	FY94: \$198,000	TOTAL: \$350,000
Prin. Invest.	NASA Tech. Officer	CASE Category
W L JOHNSON	MSFC/R C DARTY	13-Physics

NAG 9-43 California Institute of Technology 1622
INVEST LUNAR/PLANETARY MATERIALS

Period	Obligations	
02/01/1983-09/01/1994	FY94: \$0	TOTAL: \$10,509,672
Prin. Invest.	NASA Tech. Officer	CASE Category
G J WASSERBURG	JSC/I D BROWNE	32-Geological Sci

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 9-94 California Institute of Technology 1623
STUDIES OF SOLAR SYSTEM CHEMISTRY
Period *Obligations*
02/01/1985-08/01/1994 FY94: \$0 TOTAL: \$969,879
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D S BURNETT JSC/I D BROWNE 47-Materials Engr

NAG 9-185 California Institute of Technology 1624
STUDY LUNAR AND METEORITE SAMPLES
Period *Obligations*
10/01/1986-07/01/1994 FY94: \$0 TOTAL: \$151,002
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L ALBEE JSC/I D BROWNE 32-Geological Sci

NAG 9-702 California Institute of Technology 1625
SOLAR WIND SAMPLE RETURN MISSION
Period *Obligations*
07/30/1993-01/01/1995 FY94: \$0 TOTAL: \$88,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D S BURNETT JSC/D P BLANCHARD 54-Env Biology

NAGW 107 California Institute of Technology 1626
ONOMY
Period *Obligations*
11/01/1980-11/30/1994 FY94: \$195,000 TOTAL: \$1,592,148
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T G PHILLIPS HQ/F C GILLET 11-Astronomy
HQ/E J WEILER

NAGW 185 California Institute of Technology 1627
HIGH PRESSURE COSMOCHEMISTRY APPLIED TO MAJOR PLANETARY
Period *Obligations*
04/01/1981-09/30/1994 FY94: \$80,400 TOTAL: \$987,972
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J STEVENSON HQ/J UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 413 California Institute of Technology 1628
RES ON A PROPOSAL ENTITLED, PHOTOCHEMICAL MODELING OF
TRANSE SPECIES IN THE STRATOSPHERE AND MESOSPHER
Period *Obligations*
01/19/1983-12/31/1994 FY94: \$98,000 TOTAL: \$1,291,278
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Y L YUNG HQ/C H JACKMAN 31-Atmos Sci
T H KRUSE HQ/D M BUTLER

NAGW 1448 California Institute of Technology 1629
LUNAR AND PLANETARY STUDIES
Period *Obligations*
09/01/1988-11/30/1994 FY94: \$71,517 TOTAL: \$587,014
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D O MUHLEMAN HQ/J H RAHE 11-Astronomy

NAGW 1478 California Institute of Technology 1630
CO-INVESTIGATOR SUPPORT ON INFRARED SPACE OBSERV.
Period *Obligations*
11/01/1988-12/31/1994 FY94: \$40,284 TOTAL: \$210,964
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A I SARGENT HQ/G S LEVY 11-Astronomy

NAGW 1499 California Institute of Technology 1631
SYNTHETIC APERTIVE PLANETARY RADAR ASTRONOMY USING THE
VERY
Period *Obligations*
11/17/1988-10/31/1994 FY94: \$48,000 TOTAL: \$247,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D O MUHLEMAN HQ/J H RAHE 11-Astronomy

NAGW 1509 California Institute of Technology 1632
PHOTOCHEMICAL STUDIES OF CHEMISTRY
Period *Obligations*
11/17/1988-12/31/1996 FY94: \$75,000 TOTAL: \$480,495
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Y L YUNG HQ/J T BERGSTRALH 11-Astronomy

NAGW 1538 California Institute of Technology 1633
PHOTOCHEMICAL AND THERMAL MODELING OF THE EARLY
ATMOSPHERE
Period *Obligations*
11/28/1988-11/30/1993 FY94: \$0 TOTAL: \$163,616
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Y L YUNG HQ/J D RUMMEL 31-Atmos Sci

NAGW 1919 California Institute of Technology 1634
HIGH ENERGY ASTRODHYSCS GAMMA-RAY ASTRONOMY RESEA
RCH AND ANALYSIS PROGRAM
Period *Obligations*
02/20/1990-09/30/1994 FY94: \$875,000 TOTAL: \$4,117,175
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E C STONE HQ/W V JONES 11-Astronomy
T A PRINCE HQ/L J KALUZIENSKI

NAGW 1941 California Institute of Technology 1635
IMPACT AND COLLISIONAL PROCESSES IN THE SOLAR SYST EM
Period *Obligations*
02/20/1990-09/30/1994 FY94: \$233,000 TOTAL: \$1,000,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J AHRENS HQ/T A MAXWELL 32-Geological Sci

NAGW 1953 California Institute of Technology 1636
NAGW-1953/CALIF INSTITUTE OF TECHNOLOGY/IMPACT
CRATERING CALCULATIONS
Period *Obligations*
01/03/1990-09/30/1994 FY94: \$80,000 TOTAL: \$397,019
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J AHRENS HQ/T A MAXWELL 32-Geological Sci

NAGW 1956 California Institute of Technology 1637
NAGW-1956/CALIF INSTITUTE OF TECHNOLOGY/DYNAMICS OF
PLANETARY ATMOSPHERES
Period *Obligations*
03/16/1990-11/30/1994 FY94: \$99,750 TOTAL: \$474,750
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A P INGERSOLL HQ/J T BERGSTRALH 11-Astronomy

NAGW 1972 California Institute of Technology 1638
RESEARCH IN SOLAR MAGNETISM AND SOLAR ACTIVITY
Period *Obligations*
02/15/1990-10/31/1994 FY94: \$340,000 TOTAL: \$1,672,805
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H ZIRIN HQ/J D BOHLIN 13-Physics
HQ/S KANE

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2144 California Institute of Technology 1639
 PROBING THE RELATIONSHIP BETWEEN ULTRALUMINOUS INF
 RARED GALAXIES AND QUASARS
Period Obligations
 05/30/1990-12/31/1994 FY94: \$273,000 TOTAL: \$1,093,000
Prin. Invest. NASA Tech. Officer CASE Category
 B T SOIFER HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2196 California Institute of Technology 1640
 NAGW-2196/CALIF INSTITUTE TECHNOLOGY/MILLIMETER
 INTERFEROMETRY OF PROTO-PLANETARY DISKS
Period Obligations
 08/09/1990-10/31/1993 FY94: \$0 TOTAL: \$163,724
Prin. Invest. NASA Tech. Officer CASE Category
 A I SARGENT HQ/J A NUTH 11-Astronomy

NAGW 2204 California Institute of Technology 1641
 NAGW-2204/CA INST. OF TECHNOLOGY/ATMOSPHERE-SURFAC E
 INTERACTIONS IN MARTIAN PHOTOCHEMISTRY THROUGH
Period Obligations
 03/06/1991-06/30/1994 FY94: \$0 TOTAL: \$128,648
Prin. Invest. NASA Tech. Officer CASE Category
 Y L YUNG HQ/J M BOYCE 32-Geological Sci
 HQ/G R RIEGLER

NAGW 2279 California Institute of Technology 1642
 IRRADIATION EFFECTS ON EXTRATERRESTRIAL GRAINS
Period Obligations
 02/26/1991-10/31/1994 FY94: \$30,004 TOTAL: \$195,013
Prin. Invest. NASA Tech. Officer CASE Category
 T A TOMBRELLO HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2297 California Institute of Technology 1643
 A LABORATORY AND OBSERVATIONAL STUDY OF THE CHEMIC AL
 EVOLUTION OF PROTOSTELLAR NEBULAE
Period Obligations
 05/21/1991-10/31/1994 FY94: \$30,000 TOTAL: \$120,000
Prin. Invest. NASA Tech. Officer CASE Category
 G A BLAKE HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2320 California Institute of Technology 1644
 EXPERIMENTAL DETERMINATION OF EARLY ATMOSPHERE/MAG MA
 EQUILIBRIA
Period Obligations
 06/13/1991-04/31/1993 FY94: \$0 TOTAL: \$90,412
Prin. Invest. NASA Tech. Officer CASE Category
 E STOLPER HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2362 California Institute of Technology 1645
 NEPTUNE DATA ANALYSIS PROGRAM MODELING OF ION PROC
 ESSES IN THE ATMOSPHERE OF TRITON AND NEPTUNE
Period Obligations
 05/22/1991-04/30/1994 FY94: \$0 TOTAL: \$236,449
Prin. Invest. NASA Tech. Officer CASE Category
 Y L YUNG HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2363 California Institute of Technology 1646
 NEPTUNE DATA ANALYSIS PROGRAM ATMOSPHERIC DYNAMICS
 FROM IMAGE SEQUENCE
Period Obligations
 03/01/1991-03/31/1995 FY94: \$0 TOTAL: \$267,963
Prin. Invest. NASA Tech. Officer CASE Category
 A P INGERSOLL HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2372 California Institute of Technology 1647
 CONTINUUM MECHANICS OF STARS, DISKS, AND JETS
Period Obligations
 06/03/1991-12/31/1994 FY94: \$48,800 TOTAL: \$322,700
Prin. Invest. NASA Tech. Officer CASE Category
 R D BLANDFORD HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2394 California Institute of Technology 1648
 NEUTRON STARS IN GLOBULAR CLUSTERS
Period Obligations
 03/22/1991-06/30/1994 FY94: \$26,250 TOTAL: \$251,219
Prin. Invest. NASA Tech. Officer CASE Category
 E S PHINNEY HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2396 California Institute of Technology 1649
 MICROWAVE HEAT FLOW AND REGOLITH MAPPER
Period Obligations
 07/15/1991-05/31/1993 FY94: TOTAL: \$167,827
Prin. Invest. NASA Tech. Officer CASE Category
 D O MUHLEMAN HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2402 California Institute of Technology 1650
 ANALYSIS OF ENERGETIC PROTON AND ELECTRON DATA IN
 NEPTUNE'S MAGNETOSPHERE
Period Obligations
 06/25/1991-12/31/1992 FY94: \$0 TOTAL: \$178,455
Prin. Invest. NASA Tech. Officer CASE Category
 E C STONE HQ/W QUAIDE 19-Phys Sci, NEC

NAGW 2439 California Institute of Technology 1651
 COMETARY NUCLEUS CORE SAMPLING
Period Obligations
 04/29/1991-01/31/1997 FY94: \$78,526 TOTAL: \$322,057
Prin. Invest. NASA Tech. Officer CASE Category
 T J AHRENS HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2491 California Institute of Technology 1652
 MARS 94 PARTICIPATING SCIENTIST PROGRAM
Period Obligations
 06/13/1991-12/31/1994 FY94: \$55,000 TOTAL: \$180,000
Prin. Invest. NASA Tech. Officer CASE Category
 B MURRAY HQ/W QUAIDE 19-Phys Sci, NEC

NAGW 2496 California Institute of Technology 1653
 NAGW-2496/CA INSTITUTE TECHNOLOGY/EVOLUTION AND
 STRUCTURE OF TRITON CONSTRAINED BY VOYAGER
Period Obligations
 06/04/1991-12/31/1994 FY94: \$0 TOTAL: \$153,604
Prin. Invest. NASA Tech. Officer CASE Category
 D J STEVENSON HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2576 California Institute of Technology 1654
 MARS '94 MISSION: CO-INVESTIGATOR PROPOSAL
Period Obligations
 08/22/1991-07/31/1994 FY94: \$0 TOTAL: \$100,124
Prin. Invest. NASA Tech. Officer CASE Category
 D O MUHLEMAN HQ/W QUAIDE 19-Phys Sci, NEC

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2806 California Institute of Technology 1655
AN INTERDIGITATED-PIXEL PIN DETECTOR
Period *Obligations*
01/06/1992-12/31/1993 FY94: \$0 TOTAL: \$337,473
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A MEWALDT HQ/J K ALEXANDER 13-Physics
HQ/D A HOLLAND

NAGW 2813 California Institute of Technology 1656
A LABORATORY AND ASTROPHYSICAL STUDY OF DRIVEN INF
RARED EMISSION FROM PAH AND PAH CLUSTERS
Period *Obligations*
01/02/1992-11/30/1994 FY94: \$36,500 TOTAL: \$109,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G A BLAKE HQ/L J CAROFF 11-Astronomy

NAGW 2816 California Institute of Technology 1657
THEORETICAL PROSPECTS FOR ORBITING VERY LONG BASEL INE
INTERFEROMETRY
Period *Obligations*
01/06/1992-11/30/1994 FY94: \$51,000 TOTAL: \$152,102
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R D BLANDFORD HQ/L J CAROFF 11-Astronomy

NAGW 2897 California Institute of Technology 1658
LOW FREQUENCY GRAVITATIONAL-WAVE SOURCES AND THEIR
IMPLICATIONS FOR FUTURE NASA MISSIONS
Period *Obligations*
02/19/1992-12/31/1994 FY94: \$49,000 TOTAL: \$147,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K S THORNE HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 2920 California Institute of Technology 1659
GAMMA RAY EMISSION FROM ACCRETING NEURON
Period *Obligations*
02/26/1992-01/31/1995 FY94: \$50,000 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R D BLANFORD HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 3005 California Institute of Technology 1660
MICROWAVE IMAGING AND SPECTROSCOPY USING THE OWENS
VALLEY SOLAR ARRAY
Period *Obligations*
03/20/1992-11/30/1994 FY94: \$75,000 TOTAL: \$219,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D GARY HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

NAGW 3011 California Institute of Technology 1661
ANALYSIS OF SYNTHETIC APERTURE RADAR IMAGES OF MAR S,
VENUS AND MERCURY
Period *Obligations*
03/20/1992-02/28/1995 FY94: \$35,000 TOTAL: \$97,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D O MUHLEMAN HQ/J M BOYCE 32-Geological Sci

NAGW 3012 California Institute of Technology 1662
DETECTION AND INTERACTIONS OF ULTRA HEAVY NUCLEI A ND
COSMIC RAY PROPAGATION
Period *Obligations*
03/20/1992-02/28/1994 FY94: \$0 TOTAL: \$80,218
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E C STONE HQ/W V JONES 13-Physics
HQ/J D BOHLIN

NAGW 3018 California Institute of Technology 1663
INTERACTIONS AMONG CONVECTION, MAGNETIC FIELDS, AN D
P-MODE OSCILLATIONS IN THE SUN
Period *Obligations*
04/03/1992-12/31/1994 FY94: \$52,000 TOTAL: \$153,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P GOLDBREICH HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

NAGW 3040 California Institute of Technology 1664
ISOTOPIC, CHEMICAL AND MORPHOLOGICAL STUDY OF INTE
RSTELLAR GRAINS PRESERVED IN METEORITES
Period *Obligations*
04/17/1992-04/30/1995 FY94: \$50,000 TOTAL: \$250,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J WASSERBURG HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3140 California Institute of Technology 1665
EVOLUTION OF THE PROTO-SOLAR NEBULA; DISKS IN THE
PRE-MAIN SEQUENCE ENVIRONMENT
Period *Obligations*
07/24/1992-07/31/1994 FY94: \$0 TOTAL: \$68,768
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A I SARGENT HQ/H C BRINTON 11-Astronomy

NAGW 3172 California Institute of Technology 1666
NAGW-3172/CA INSTITUTE OF TECHNOLOGY/EARLY EVOLUTI ON
OF THE SOLAR SYSTEM: APERTURE SYNTHESIS IMAGIN
Period *Obligations*
08/14/1992-12/31/1993 FY94: \$0 TOTAL: \$34,290
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A I SARGENT HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3207 California Institute of Technology 1667
MILLISECOND PULSARS AND PLANETARY SYSTEMS
Period *Obligations*
09/30/1992-09/30/1993 FY94: \$0 TOTAL: \$49,944
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S R KULKARNI HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3253 California Institute of Technology 1668
NAGW-3253/CALTECH/THE ORIGINA AND EVOLUTION OF NEU TRON
STARS
Period *Obligations*
11/09/1992-04/30/1995 FY94: \$100,080 TOTAL: \$210,202
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S KULKARNI HQ/G R RIEGLER 11-Astronomy

NAGW 3297 California Institute of Technology 1669
NAGW-3297/CALTECH/DEVELOPMENT AND APPLICATION OF T HE
ION MICROPROBE FOR ANALYSIS OF EXTRATERRESTRIA
Period *Obligations*
12/10/1992-11/14/1995 FY94: \$378,000 TOTAL: \$738,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J WASSERBURG HQ/G C BRINTON 32-Geological Sci

NAGW 3303 California Institute of Technology 1670
SUBMILLIMETER FOURIER TRANSFORM SPECTROSCOPY OF PL
ANETARY ATMOSPHERES
Period *Obligations*
01/06/1993-11/30/1994 FY94: \$38,400 TOTAL: \$83,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E SARABYN HQ/H C BRINTON 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 3329 California Institute of Technology 1671
APPLICATION OF STABLE ISOTOPE MEASUREMENTS TO THE STUDY
OF THE ORIGIN AND HISTORY OF METEORITES
Period Obligations
12/31/1992-12/14/1993 FY94: \$0 TOTAL: \$70,513
Prin. Invest. NASA Tech. Officer CASE Category
H P TAYLOR HQ/C H BRINTON 32-Geological Sci

NAGW 3337 California Institute of Technology 1672
NAGW-3337/CA INST. TECHNOLOGY/GEOCHEMICAL AND ISOTOP
IC INVESTIGATIONS OF LUNAR AND PLANETARY MATERIALS
Period Obligations
01/26/1993-11/14/1994 FY94: \$828,100 TOTAL: \$1,656,200
Prin. Invest. NASA Tech. Officer CASE Category
G J WASSERBURG HQ/H C BRINTON 32-Geological Sci

NAGW 3393 California Institute of Technology 1673
THE PHY. ST. OF THE VENUS SUR. AS REVEALED FROM MAGELLAN
RADIO EMISS. AND REFLEC. DATA
Period Obligations
03/09/1993-03/14/1996 FY94: \$42,696 TOTAL: \$101,975
Prin. Invest. NASA Tech. Officer CASE Category
D O MUHLEMAN HQ/J T BERGSTALH 32-Geological Sci

NAGW 3491 California Institute of Technology 1674
VENUS EVOLUTION AND STRUCTURE USING MAGELLAN DATA
Period Obligations
03/27/1993-03/14/1995 FY94: \$50,400 TOTAL: \$119,897
Prin. Invest. NASA Tech. Officer CASE Category
D J STEVENSON HQ/J T BERGSTALH 32-Geological Sci

NAGW 3507 California Institute of Technology 1675
WATES ON VENUS EVOLUTION AND ORIGIN AS CONSTRAINED BY
PRESENT DATA
Period Obligations
04/09/1993-03/31/1995 FY94: \$45,500 TOTAL: \$110,500
Prin. Invest. NASA Tech. Officer CASE Category
Y L YUNG HQ/J T BERGSTALH 32-Geological Sci

NAGW 3533 California Institute of Technology 1676
EXPERIMENTAL STUDIES OF PHASE EQUILIBRIA OF METEORITES
AND PLANETARY INTERIORS
Period Obligations
04/29/1993-02/28/1995 FY94: \$155,571 TOTAL: \$305,931
Prin. Invest. NASA Tech. Officer CASE Category
E STOLPER HQ/H C BRINTON 32-Geological Sci

NAGW 3534 California Institute of Technology 1677
NAGW-3534/CALTECH/IGENEOUS ORIGINS FOR THE SODIUM
CLOUD OF IO
Period Obligations
04/21/1993-04/30/1995 FY94: \$41,096 TOTAL: \$84,355
Prin. Invest. NASA Tech. Officer CASE Category
D S BURNETT HQ/H C BRINTON 32-Geological Sci

NAGW 3592 California Institute of Technology 1678
EXPER. AND ANAL. STUD. OF SOLAR SYSTEM CHEMISTRY
Period Obligations
05/14/1993-01/31/1995 FY94: \$116,442 TOTAL: \$239,012
Prin. Invest. NASA Tech. Officer CASE Category
D S BURNETT HQ/H C BRINTON 32-Geological Sci

NAGW 3780 California Institute of Technology 1679
THE 7TH INTERNATIONAL SYMPOSIUM ON CI COMPOUNDS
Period Obligations
09/23/1993-06/30/1994 FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
M E LIDSTROM HQ/D E WICKLAND 39-Env Sci, NEC
HQ/A C JANETOS

NAGW 3883 California Institute of Technology 1680
NAGW-3883/B CALIF. INST. OF TECH. 'APPL. OF STABLE ISOT.
MEASUREMENT TO THE STUDY OF THE ORIGIN...'
Period Obligations
03/08/1994-02/28/1995 FY94: \$106,034 TOTAL: \$106,034
Prin. Invest. NASA Tech. Officer CASE Category
S EPSTEIN HQ/J BOYCE 32-Geological Sci

NAGW 3893 California Institute of Technology 1681
MOLECULAR BEAM STUDIES OF STRATOSPHERIC PHOTOCHEM
ISTRY
Period Obligations
03/16/1994-12/31/1994 FY94: \$64,131 TOTAL: \$64,131
Prin. Invest. NASA Tech. Officer CASE Category
M OKUMARA HQ/M J KURYLO 31-Atmos Sci
HQ/R F HAMPSON

NAGW 3994 California Institute of Technology 1682
STUDIES OF IMAGING TECHNIQUES FOR HIGH-RESOLUTION
IMAGING OF SOLAR HARD X-RAYS AND GAMMA-RAYS
Period Obligations
06/07/1994-06/30/1996 FY94: \$70,213 TOTAL: \$70,213
Prin. Invest. NASA Tech. Officer CASE Category
G J HURFORD HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

NAGW 4011 California Institute of Technology 1683
PALOMAR OBSERVATIONS OF THE COLLISION OF COMET SHO
EMAKER-LEVY 9 WITH JUPITER
Period Obligations
05/23/1994-02/14/1995 FY94: \$14,004 TOTAL: \$14,004
Prin. Invest. NASA Tech. Officer CASE Category
G NEUGEBAUER HQ/J H RAHE 11-Astronomy

NAGW 4026 California Institute of Technology 1684
ION MICROPROBE MEASUREMENTS OF C IN PRIMITIVE METE
ORITES
Period Obligations
05/26/1994-04/30/1995 FY94: \$32,622 TOTAL: \$32,622
Prin. Invest. NASA Tech. Officer CASE Category
E STOLPER HQ/P ROGERS 47-Materials Engr

NAGW 4030 California Institute of Technology 1685
MILLIMETER INTERFEROMETRY OF PROTO-PLANETARY DISKS
Period Obligations
06/03/1994-03/31/1997 FY94: \$52,113 TOTAL: \$52,113
Prin. Invest. NASA Tech. Officer CASE Category
A SARGENT HQ/P ROGERS 11-Astronomy

NAGW 4058 California Institute of Technology 1686
PRECISION SOLAR DISK PHOTOMETRY. A TOOL FOR
UNDERSTANDING CHANGES IN THE SUN'S LUMINOSITY
Period Obligations
06/17/1994-01/31/1997 FY94: \$35,416 TOTAL: \$35,416
Prin. Invest. NASA Tech. Officer CASE Category
K G LIBBRECHT HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 4110 California Institute of Technology 1687
THE X-RAY BACKGROUND AS A PROBE OF GALAXY EVOLUTIO N
Period Obligations
08/19/1994-04/30/1995 FY94: \$97,500 TOTAL: \$97,500
Pnn. Invest. NASA Tech. Officer CASE Category
T HAMILTON HQ/D E NEW 13-Physics

NAS 3-27263 California Institute of Technology 1688
SOLUTE NUCLEATION AND GROWTH IN SUPERCRITICAL FLUID MIXTURES
Period Obligations
08/18/1994-08/17/1997 FY94: \$44,105 TOTAL: \$44,105
Pnn. Invest. NASA Tech. Officer CASE Category
G T SMEDLEY LERC/F KOHL 43-Chem Engr
G WILEMSKI

NAS 5-31348 California Institute of Technology 1689
APPLIED INFORMATION STUDY
Period Obligations
06/19/1991-06/30/1993 FY94: \$0 TOTAL: \$55,000
Pnn. Invest. NASA Tech. Officer CASE Category
S DJORGOVSKI GSFC/H BURRITT 22-Computer Science
GSFC/J BREDEKAMP

NAS 5-31459 California Institute of Technology 1690
PHASE B DEFINITION STUDY OF THE ADVANCED COMPOSITION EXPLORER (ACE) SCIENCE PAYLOAD
Period Obligations
04/22/1991-02/01/1994 FY94: \$1,579,154 TOTAL: \$7,305,060
Pnn. Invest. NASA Tech. Officer CASE Category
E STONE GSFC/J LAUDADIO 13-Physics

NAS 5-32626 California Institute of Technology 1691
PHASE C/D DESIGN AND DEVELOPMENT OF THE ADVANCED COMPOSITION EXPLORER (ACE) SCIENCE PAYLOAD
Period Obligations
01/03/1994-11/21/1997 FY94: \$9,801,900 TOTAL: \$9,801,900
Pnn. Invest. NASA Tech. Officer CASE Category
E STONE GSFC/J LAUDADIO 19-Phys Sci, NEC

NAS 5-38097 California Institute of Technology 1692
JOINT ULTRAVIOLET NIGHTSKY OBSERVER (JUNO) FOR SMALL EXPLORERS (SMEX) PROGRAM
Period Obligations
12/17/1993-10/17/1994 FY94: \$502,000 TOTAL: \$502,000
Pnn. Invest. NASA Tech. Officer CASE Category
C MARTIN GSFC/R ALEMAN 11-Astronomy

NCCW 62 California Institute of Technology 1693
KECK OBSERVATORY COLLORATION
Period Obligations
09/30/1994-09/30/2000 FY94: \$6,800,000 TOTAL: \$6,800,000
Pnn. Invest. NASA Tech. Officer CASE Category
E STONE HQ/J H RAHE 11-Astronomy

NGT 00-030-075 California Institute of Technology 1694
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/30/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
S O PEHKONEN HQ/D M BUTLER 33-Oceanography
M R HOFFMANN HQ/G S WILSON

NGT 00-030-135 California Institute of Technology 1695
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/21/1992-08/31/1993 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
M F GERSTELL HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-050-726 California Institute of Technology 1696
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/13/1991-06/30/1993 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
Y L YUNG HQ/F C OWENS 19-Phys Sci, NEC

NGT 00-050-727 California Institute of Technology 1697
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
10/28/1991-09/30/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
M OKUMURA JPL/H ASHKENAS 12-Chemistry

NGT 00-050-742 California Institute of Technology 1698
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/01/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
J C DOYLE HQ/F C OWENS 45-Elec Engr

NGT 00-050-800 California Institute of Technology 1699
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
E M STOLPER HQ/F C OWENS 12-Chemistry

NGT 00-050-804 California Institute of Technology 1700
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/10/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
T A PRINCE HQ/F C OWENS 11-Astronomy

NGT 00-050-818 California Institute of Technology 1701
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
K G LIBBRECHT HQ/J ALEXANDER 11-Astronomy

NGT 00-050-890 California Institute of Technology 1702
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/17/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
M OKUMURA JPL/H ASHKENAS 12-Chemistry

NGT 00-050-891 California Institute of Technology 1703
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/05/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
B C MURRAY JPL/H ASHKENAS 11-Astronomy

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NGT 00-050-893 California Institute of Technology 1704
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/04/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 G NEUGEBAVER JPL/A ASHKENAS 13-Physics

NGT 00-051-071 California Institute of Technology 1705
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/24/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 D STEVENSON HQ/D HOLLAND 11-Astronomy

NGT 00-051-084 California Institute of Technology 1706
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/01/1993-09/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 D BURNETT HQ/D HOLLAND 12-Chemistry

NGT 00-051-156 California Institute of Technology 1707
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/04/1993-09/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 R MEWALDT HQ/D HOLLAND 13-Physics

NGT 00-051-184 California Institute of Technology 1708
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/20/1993-09/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 T A PRINCE MSFC/F SIX 13-Physics

NGT 00-051-201 California Institute of Technology 1709
 GRAD STUDENT RESEARCHERS PROGRAM
Period Obligations
 04/25/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 J CARLSTROM MSFC/F SIX 13-Physics

NGT 00-051-212 California Institute of Technology 1710
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/08/1994-09/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 T G PHILLIPS GSFC/G SOFFEN 13-Physics

NGT 00-051-276 California Institute of Technology 1711
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 G A BLAKE JPL/C HIX 12-Chemistry

NGT 00-060-009 California Institute of Technology 1712
 NASA SUMMER UNDERGRADUATE RESEARCH PROGRAM
Period Obligations
 03/09/1993-07/31/1995 FY94: \$30,000 TOTAL: \$80,000
Prin. Invest. NASA Tech. Officer CASE Category
 C MERKEL HQ/A S MCGEE 49-Engr. NEC
 HQ/E T SCHWARTZ

NGT 00-070-265 California Institute of Technology 1713
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 05/04/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 D RUFLEDGE JPL/H ASHKENAS 45-Elec Engr

NGT 00-070-287 California Institute of Technology 1714
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 11/02/1992-09/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 R A HREWALDS HQ/J K ALEXANDER 13-Physics

NGT 00-070-335 California Institute of Technology 1715
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 07/01/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 J HOPEFIELD HQ/D J RUSSELL 99-Multi-Discip

NGT 00-070-372 California Institute of Technology 1716
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 08/22/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 H G HOMUNG HQ/D K RUSSELL 42-Astro Engr

NGT 00-090-175 California Institute of Technology 1717
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/10/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
 E ZUKOSKIN HQ/D K RUSSELL 99-Multi-Discip

NGT 5-3790 California Institute of Technology 1718
 SUMMER FACULTY FELLOWSHIP PROGRAM -TRAINING GRANT
Period Obligations
 01/01/1979-03/31/1995 FY94: \$411,801 TOTAL: \$4,777,549
Prin. Invest. NASA Tech. Officer CASE Category
 A L ALBEE HQ/A S MCGEE 49-Engr. NEC
 HQ/E T SCHWARTZ

NSG-1483 California Institute of Technology 1719
 LOW SPEED IMPACT DAMAGE ON COMPOSITE MATERIALS
Period Obligations
 01/04/1978-11/14/1994 FY94: \$60,000 TOTAL: \$958,543
Prin. Invest. NASA Tech. Officer CASE Category
 W G KNAUSS LARC/J H STARNES 41-Aero Engr
 C D BABCOCK

NAG 2-743 California Polytechnic State U-San Luis 1720
 MODIFICATION OF ACSYNT AIRCRAFT PRELIMINARY DESIG N
 COMPUTER PROGRAM
Period Obligations
 12/02/1991-09/30/1993 FY94: \$0 TOTAL: \$41,661
Prin. Invest. NASA Tech. Officer CASE Category
 D SANDLIN ARC/J J SAMUELS 41-Aero Engr
 ARC/A S HAHN

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 2-778 California Polytechnic State U-San Luis 1721
EVALUATION OF DUAL FLOW THRUST VECTOR NOZZLES WITH EXHAUST STREAM IMPINGEMENT
Period Obligations
04/10/1992-07/30/1994 FY94: \$35,667 TOTAL: \$83,047
Prin. Invest. NASA Tech. Officer CASE Category
T W CARPENTER ARC/R J RAY 41-Aero Engr
S DOBBINS/A H BOWERS

NAG 2-833 California Polytechnic State U-San Luis 1722
INTUITIVE GENERIC DISPLAYS FOR REAL TIME SELECTION OF AERODYNAMIC COEFFICIENTS FURING FLIGHT SIMULA
Period Obligations
04/15/1993-12/14/1994 FY94: \$0 TOTAL: \$45,491
Prin. Invest. NASA Tech. Officer CASE Category
D BIEZAD ARC/L J SCHILLING 29-Math/Cmputer,NEC
ARC/M B EVANS

NAG 2-932 California Polytechnic State U-San Luis 1723
NUMERICAL SIMULATION OF THE 11 X 11 TRANSONIC WIND TUNNEL USING 'TRANAIR' FINITE ELEMENT CODE
Period Obligations
09/27/1994-04/14/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
J G LOCASCIO ARC/M MADISON 41-Aero Engr

NCA 2-626 California Polytechnic State U-San Luis 1724
JET BLOWING CONTROL FOR CHINED FOREBODIES
Period Obligations
06/24/1991-06/30/1993 FY94: \$0 TOTAL: \$62,627
Prin. Invest. NASA Tech. Officer CASE Category
R M CUMMINGS ARC/L B SCHIFF 41-Aero Engr

NCA 2-722 California Polytechnic State U-San Luis 1725
A NUMERICAL INVESTIGATION OF AN UNSTEADY AIRFOIL WITH A SLAT
Period Obligations
06/12/1992-09/15/1993 FY94: \$0 TOTAL: \$13,653
Prin. Invest. NASA Tech. Officer CASE Category
J TSO ARC/C TUNG 41-Aero Engr

NCA 2-779 California Polytechnic State U-San Luis 1726
OPTIMIZING PIEZOELECTRIC SENSORS/ACTUATORS FOR VIBRATION DAMPING
Period Obligations
02/05/1993-11/30/1993 FY94: \$0 TOTAL: \$20,869
Prin. Invest. NASA Tech. Officer CASE Category
F A KOLKAILAH ARC/M W KEHOE 41-Aero Engr

NCA 2-811 California Polytechnic State U-San Luis 1727
AN EXPERIMENTAL INVESTIGATION OF THE EFFECT OF UPPER SURFACE BLOWING ON DYNAMIC STALL
Period Obligations
04/21/1993-08/31/1994 FY94: \$998 TOTAL: \$12,722
Prin. Invest. NASA Tech. Officer CASE Category
J TSO ARC/K MCALISTER 41-Aero Engr

NCA 2-816 California Polytechnic State U-San Luis 1728
AN EXPERIMENTAL INVESTIGATION OF REDUCTION OF AERO DYNAMICALLY GENERATED MICROPHONE SELF-NOISE
Period Obligations
05/12/1993-12/31/1994 FY94: \$13,981 TOTAL: \$27,981
Prin. Invest. NASA Tech. Officer CASE Category
J TSO ARC/P T SODERMAN 41-Aero Engr

NCA 2-836 California Polytechnic State U-San Luis 1729
A NUMERICAL INVESTIGATION OF THE EFFECT OF HIGHER HARMONIC CONTROL OF BLADE-VORTEX INTERACTION NOISE
Period Obligations
08/25/1993-01/15/1994 FY94: \$0 TOTAL: \$8,800
Prin. Invest. NASA Tech. Officer CASE Category
J TSO ARC/C TUNG 41-Aero Engr

NCC 2-748 California Polytechnic State U-San Luis 1730
EVALUATION OF SINGLE AND DUAL FLOW THRUST VECTOR NOZZLES WITH POST EXIT VANES
Period Obligations
03/03/1992-12/31/1994 FY94: \$59,988 TOTAL: \$138,597
Prin. Invest. NASA Tech. Officer CASE Category
T W CARPENTER ARC/A H BOWERS 41-Aero Engr
M BOVARKOVICH
M DORIS

NCC 2-761 California Polytechnic State U-San Luis 1731
NUMERICAL INVESTIGATION OF MULTI-ELEMENT AIRFOILS
Period Obligations
05/21/1992-06/30/1993 FY94: TOTAL: \$44,257
Prin. Invest. NASA Tech. Officer CASE Category
R M CUMMINGS ARC/J C ROSS 41-Aero Engr
P C CARRANNATO

NCC 2-775 California Polytechnic State U-San Luis 1732
GLOBAL POSITIONING SYSTEM FEASIBILITY STUDY FOR HELICOPTER APPROACHES
Period Obligations
10/19/1992-01/14/1994 FY94: \$0 TOTAL: \$41,812
Prin. Invest. NASA Tech. Officer CASE Category
D J BIEZAD ARC/H N SWENSON 41-Aero Engr
D N KAUFMANN
W B PATTERSON

NCC 2-800 California Polytechnic State U-San Luis 1733
RAPID ASSESSMENT OF AGLITY FOR CONCEPTUAL DESIGN SYNTHESIS
Period Obligations
05/20/1993-06/30/1995 FY94: \$4,708 TOTAL: \$44,447
Prin. Invest. NASA Tech. Officer CASE Category
D J BEIZAD ARC/G C HILL 41-Aero Engr

NCC 2-813 California Polytechnic State U-San Luis 1734
NUMERICAL DESIGN OF ADVANCED MULTI-ELEMENT AIRFOIL S
Period Obligations
07/16/1993-09/30/1994 FY94: \$31,608 TOTAL: \$49,608
Prin. Invest. NASA Tech. Officer CASE Category
R M CUMMINGS ARC/J R ROSS 41-Aero Engr
D L MATHIAS

NCC 2-833 California Polytechnic State U-San Luis 1735
CONTROLS DESIGN WITH CROSSFEEDS FOR HOVERING ROTOR CRAFT USING QUANTITATIVE FEEDBACK THEORY
Period Obligations
11/16/1993-12/31/1994 FY94: \$39,337 TOTAL: \$39,337
Prin. Invest. NASA Tech. Officer CASE Category
D BIEZAD ARC/M B TISCHLER 41-Aero Engr

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NCC 2-834 California Polytechnic State U-San Luis 1736
MODIFICATION OF ACSYNT AIRCRAFT COMPUTER PROGRAM F OR
PRELIMINARY DESIGN

Period	Obligations	
11/15/1993-03/31/1995	FY94: \$41,720	TOTAL: \$41,720
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D BIEZAD	ARC/P A GELHAUSEN	41-Aero Engr
R R OVIEDO	ARC/A S HAHN	

NCC 2-855 California Polytechnic State U-San Luis 1737
SUBSONIC WING OPTIMIZATION FOR HANDLING QUALITIES USING
ACSYNT

Period	Obligations	
05/16/1994-06/30/1995	FY94: \$10,283	TOTAL: \$10,283
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D J BIEZAD	ARC/P A GELHAUSEN	41-Aero Engr
	ARC/G H KIDWELL	

NCC 2-857 California Polytechnic State U-San Luis 1738
COMPUTATIONAL INVESTIGATION OF FLAP EDGES

Period	Obligations	
06/02/1994-12/31/1994	FY94: \$20,000	TOTAL: \$20,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R M CUMMINGS	ARC/J C ROSS	41-Aero Engr
S L GRABHORN	ARC/K R TONER	

NCC 2-4003 California Polytechnic State U-San Luis 1739
EVALUATION OF SINGLE AND DUAL FLOW THRUST VECTOR
NOZZLES WITH EXHAUST STREAM IMPINGEMENT

Period	Obligations	
05/17/1994-04/30/1995	FY94: \$51,100	TOTAL: \$51,100
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T W CARPENTER	ARC/A H BOWERS	41-Aero Engr
T L ARCHOM		
K M CAMPBELL		

NCC 2-5031 California Polytechnic State U-San Luis 1740
STRUCTURAL FLAW DETECTION USING PIEZOELECTRIC SENSORS
ON A COMPOSITE PLATE

Period	Obligations	
02/03/1994-01/31/1995	FY94: \$29,669	TOTAL: \$29,669
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F KOLKAILAH	ARC/D VORACEK	41-Aero Engr

NGT 00-010-012 California Polytechnic State U-San Luis 1741
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP P
ROGRAM

Period	Obligations	
10/04/1993-09/30/1994	FY94: \$49,960	TOTAL: \$49,960
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R M CUMMINGS	HQ/G S SEIDEL	41-Aero Engr
H J FREEMAN	HQ/J R FACEY	

NGT 00-070-228 California Polytechnic State U-San Luis 1742
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM

Period	Obligations	
05/21/1991-06/30/1993	FY94:	TOTAL: \$42,093
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R M COMMINGS	HQ/F C OWENS	41-Aero Engr

NCC 2-529 California State Univ.- hayward 1743
ANALYSIS OF THE VISUAL FRAMEWORK EFFECT

Period	Obligations	
02/01/1988-06/30/1994	FY94: \$0	TOTAL: \$318,526
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A E STOPER	ARC/M M COHEN	69-Psych, NEC

NGT 00-070-274 California State Univ.- hayward 1744
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM

Period	Obligations	
06/26/1992-06/30/1993	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S B OPPENBEIMER	ARC/M MOORE	12-Chemistry

NAS 3-26127 California State University - Chico 1745
SERVICES TO OPERATE NASA LEWIS RESEARCH CENTER

Period	Obligations	
11/01/1990-10/31/1995	FY94: \$275,000	TOTAL: \$961,174
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J WRIGHT	LERC/D CONRAD	99-Multi-Discip
S GAUL	LERC/C DEMONGEOT	

NCA 2-815 California State University - Chico 1746
ASSESSMENT OF PEST AND DISEASE INHNTENSTIY ON PHYLLOX
ERATED GRAPEVINES IN NAPA COUNTY AND THE EFFECT..

Period	Obligations	
05/21/1993-05/31/1994	FY94: \$0	TOTAL: \$33,571
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J R BURLEIGH	ARC/J S SALUTE	56-Medical Sciences
M W BALDY		
R W BALDY		

NCC 2-5062 California State University - Chico 1747
ASSESSMENT OF LEAF AREA VINE VIGOR GRAPE YIELD AND
QUALITY OF PHYLLOXERA-INFESTED AND NON-INFESTED ..

Period	Obligations	
06/03/1994-12/31/1994	FY94: \$24,814	TOTAL: \$24,814
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M BALDY	ARC/J SALUTE	39-Env Sci, NEC
R BALDY	ARC/C HLAVKA	

NAG 2-802 California State University - Fresno 1748
REMOTE SENSING AS AN AID TO HYDROLOGICAL ASSESSEMENT
AND LANDSCAPE MAPPING

Period	Obligations	
09/16/1992-12/31/1994	FY94: \$62,000	TOTAL: \$240,200
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J F PARIS	ARC/D L PETERSON	54-Env Biology

NAG 3-1100 California State University - Fullerton 1749
REDUNDANCY/COST ANALYSIS

Period	Obligations	
12/14/1989-01/07/1994	FY94:	TOTAL: \$97,035
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R C SUICH	LERC/R L PATTERSON	49-Engr, NEC

NAGW 2515 California State University - Fullerton 1750
METEORITE COMPACTION AGES AND THE SEARCH FOR EVIDENCE
FOR AN EARLY ACTIVE (T-TAURI) SUN

Period	Obligations	
02/26/1991-10/31/1993	FY94: \$0	TOTAL: \$108,300
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D S WOLLUM	HQ/J A NUTH	19-Phys Sci, NEC

NAG 3-1050 California State University - Long Beach 1751
THE CALCULATION OF FLOW OVER SWEPT WINGS WITH ICE

Period	Obligations	
05/30/1989-03/01/1994	FY94: \$0	TOTAL: \$455,438
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T CEBECI	LERC/C S BIDWELL	41-Aero Engr

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAG 3-1634 California State University - Long Beach 1752
MAGNETORHEOLOGICAL FLUIDS IN MICROGRAVITY
Period *Obligations*
06/29/1994-06/28/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LIU LERC/N R HALL 13-Physics

NAGW 3707 California State University - Los Angeles 1753
PREDICTING PHOTOSYNTHETIC FLUXES FROM SPECTRAL REFLECTANCE OF LEAVES AND CANOPIES
Period *Obligations*
08/19/1993-12/31/1994 FY94: \$96,943 TOTAL: \$166,881
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A GAMON HQ/D E WICKLAND 39-Env Sci, NEC
HQ/A C JANETOS

NAGW 4103 California State University - Los Angeles 1754
EFFECTS OF DECENTRALIZED CONTROL IN DESIGN OF A LARGE SEGMENT
Period *Obligations*
08/15/1994-08/30/1995 FY94: \$400,000 TOTAL: \$400,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H BOUSSALIS HQ/B L WHITE 11-Astronomy

NCC 1-174 California State University - Los Angeles 1755
COMPUTATIONAL FLUID DYNAMICS VALIDATION OF TRANSONIC HIGH REYNOLD'S NUMBER
Period *Obligations*
04/09/1993-12/31/1994 FY94: \$0 TOTAL: \$51,136
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C C WU LARC/R A WAHLS 41-Aero Engr
LARC/J A AL-SADI

NGT 00-090-051 California State University - Los Angeles 1756
UNDERGRADUATE STUDENT RESEARCHERS PRG
Period *Obligations*
08/22/1991-08/31/1994 FY94: \$0 TOTAL: \$93,177
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M RANDLE HQ/B WHITE 49-Engr, NEC

NGT 00-090-064 California State University - Los Angeles 1757
A PROGRAM TO IMPROVE TRANSFER RATES OF UNDERREPRESENTED MINORITY PRE-ENGINEERING STUDENTS FROM CA
Period *Obligations*
08/21/1992-08/14/1994 FY94: \$122,000 TOTAL: \$244,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R LANDIS HQ/B WHITE 49-Engr, NEC
HQ/S MASSENBERG

NAGW 2770 California State University - Northridge 1758
A DETAILED COMPARISON OF THE SMM/ACRIM TOTAL SOLAR IRRADIANCE TO PRECISE GROUND-BASED PHOTOMETRY
Period *Obligations*
12/06/1991-10/31/1993 FY94: \$0 TOTAL: \$39,814
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G A CHAPMAN HQ/W J WAGNER 13-Physics
HQ/K LANG

NAGW 3017 California State University - Northridge 1759
NAGW-3017/CA STATE UNIV/PHOTOMETRIC OBSERVATIONS IN SUPPORT OF ACRIM 2 ON THE UARS MISSION
Period *Obligations*
04/17/1992-03/31/1995 FY94: \$75,402 TOTAL: \$219,691
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G A CHAPMAN HQ/W J WAGNER 11-Astronomy
HQ/J D BOHLIN

NCA 2-790 California State University - Northridge 1760
THREE DIMENSIONAL FLOW ANALYSIS OF A SCRAMJET COMBUSTOR USING FINITE TECHNIQUES AND UNSTRUCTURED GRID
Period *Obligations*
02/04/1993-12/31/1993 FY94: \$0 TOTAL: \$25,736
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K RUSSELL ARC/K GUPTA 41-Aero Engr

NCA 5-116 California State University - Northridge 1761
CSUN PROJECT APT
Period *Obligations*
02/18/1993-06/30/1994 FY94: \$0 TOTAL: \$74,994
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D MILLER GSFC/M HARTMAN 22-Computer Science

NCC 2-821 California State University - Northridge 1762
COMPARISON OF SIMULATION AND FLIGHT DATA USING A NEW DYNAMIC WIND TUNNEL DATA TECHNIQUE
Period *Obligations*
08/19/1993-09/08/1994 FY94: \$38,965 TOTAL: \$42,565
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S D SCHWARTZ ARC/A H BOWERS 41-Aero Engr
J R DAKER

NGT 00-090-032 California State University - Northridge 1763
AN INTER-INSTITUTIONAL ENGINEERING RETENTION PROGRAM FOR ETHNIC MINORITIES
Period *Obligations*
08/01/1990-06/14/1994 FY94: \$0 TOTAL: \$1,046,582
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MORNING HQ/M S MARGOLIS 49-Engr, NEC

NGT 00-090-055 California State University - Northridge 1764
UNDERGRADUATE STUDENT RESEARCHERS PRG
Period *Obligations*
09/26/1991-08/31/1994 FY94: \$0 TOTAL: \$67,860
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M MACIAS HQ/B WHITE 49-Engr, NEC
C MORNING

NGT 00-090-111 California State University - Northridge 1765
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/24/1992-08/19/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S OPPENHEIMER HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-227 California State University - Sacramento 1766
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
10/25/1993-08/14/1994 FY94: \$12,000 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A STRIPLEN HQ/D RUSSELL 99-Multi-Discip

NAG 5-2010 Claremont McKenna College 1767
STUDY OF BURST DETECTIONS BY BATSE
Period *Obligations*
07/08/1992-01/14/1995 FY94: \$21,898 TOTAL: \$114,877
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C HIGDON GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NAG 8-998 Cypress College 1768
JOVE
Period *Obligations*
11/01/1993-05/31/1995 FY94: \$42,000 TOTAL: \$42,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J CATANZARITE MSFC/F SIX 11-Astronomy

NCC 2-5098 Harvey Mudd College 1776
LED WORKSTATION ILLUMINATION
Period *Obligations*
08/18/1994-07/31/1995 FY94: \$33,306 TOTAL: \$33,306
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J ROSENBERG ARC/M L HINES 49-Engr, NEC

NAGW 3335 D-Q University 1769
AMERICAN INDIAN YOUNG NASA SCHOLARS PROGRAM IN MATHEMATICS AND SCIENCE
Period *Obligations*
02/02/1993-05/31/1995 FY94: \$109,836 TOTAL: \$235,378
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A LOUFAS ARC/A HATCH 99-Multi-Discip
HQ/B WHITE

NAG 2-4007 Loyola Marymount University 1777
DEVELOPMENT AND APPLICATION OF MULTIDISCIPLINARY ENGINEERING SYSTEMS ANALYSIS CAPABILITIES
Period *Obligations*
07/01/1994-10/30/1994 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B OPPENHEIM ARC/K GUPTA 41-Aero Engr

NGT 00-090-054 D-Q University 1770
UNDERGRADUATE STUDENT RESEARCHERS PRG
Period *Obligations*
09/25/1991-08/31/1994 FY94: \$0 TOTAL: \$104,830
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A LOUFAS HQ/B L WHITE 49-Engr, NEC

NAG 8-275 Loyola Marymount University 1778
JOVE
Period *Obligations*
11/04/1992-05/31/1995 FY94: \$75,000 TOTAL: \$114,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J SANNY MSFC/F SIX 99-Multi-Discip
S SCHECK
C WEEKS

NCA 2-724 Foothill College 1771
INTERNSHIP PLAN FOR SCIENTIFIC TECHNICIANS AND BUSINESS CAREER TECHNICIANS
Period *Obligations*
07/01/1992-06/30/1993 FY94: TOTAL: \$682,486
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M CONWAY ARC/M LANE 99-Multi-Discip

NGT 00-090-067 National Hispanic University 1779
CIENTIFICOS PROJECT - FUTURE HISPANIC SCIENTISTS PROJECT
Period *Obligations*
08/28/1992-08/31/1993 FY94: \$98,588 TOTAL: \$198,320
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R PARKER ARC/E BUGNA 99-Multi-Discip
ARC/J VALENTINE

NCC 2-785 Foothill-De Anza Com College System 1772
Off
ADVANCED AUTOMATED COMPUTER SYSTEM METHODOLOGIES
Period *Obligations*
03/05/1993-12/31/1994 FY94: \$104,066 TOTAL: \$332,536
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P YASUDA ARC/D B MCKELLER 22-Computer Science
J HARRIS

NAG 5-911 San Diego State University 1780
MEASUREMENT OF EVAPOTRANSPIRATION WITH COMBINED REFLECTIVE THERMAL INFRARED OBSERVATIONS
Period *Obligations*
06/15/1987-08/31/1993 FY94: \$0 TOTAL: \$334,517
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A S HOPE GSFC/B CHOUDHURY 39-Env Sci, NEC
GSFC/F HALL

NGT 2-1001 Foothill-De Anza Com College System 1773
Off
SCIENTIFIC-TECHNICAL AND BUSINESS CAREERS TRAINING GRANT
Period *Obligations*
07/07/1993-04/30/1995 FY94: \$830,935 TOTAL: \$1,614,284
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M CONWAY ARC/M A LANE 99-Multi-Discip
ARC/J M MCCULLOUGH

NAG 5-2064 San Diego State University 1781
TIME RESOLVED OBSERVATIONS OF THE LIKELY DO HERCULIS SYSTEM, 1H0709-360
Period *Obligations*
08/05/1992-02/14/1994 FY94: \$0 TOTAL: \$17,016
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A W SHAFTER GSFC/R PETRE 11-Astronomy

NGT 2-1002 Foothill-De Anza Com College System 1774
Off
INDUSTRIAL CRAFTS TRAINING GRANT
Period *Obligations*
07/07/1993-11/30/1994 FY94: \$687,563 TOTAL: \$787,563
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M CONWAY ARC/S S LONGCHAMPS 99-Multi-Discip
ARC/P J HARO

NAGW 2031 San Diego State University 1782
NAGW-2031/SAN DIEGO STATE UNIV/CANOPY REFLECTANCE MODELLING OF SEMIARID VEGETATION
Period *Obligations*
04/27/1990-12/31/1994 FY94: \$27,244 TOTAL: \$175,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J FRANKLIN HQ/G ASRAR 39-Env Sci, NEC
HQ/T J PIEPER

NCC 2-5016 Harvey Mudd College 1775
STOWABLE GLOVE BOX FOR THE SPACE SHUTTLE ADVANCED ANIMAL HABITAT
Period *Obligations*
11/30/1993-06/30/1994 FY94: \$33,000 TOTAL: \$33,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C DYM ARC/J JENNER 46-Mech Engr

NAGW 2154 San Diego State University 1783
CLASSIFICATION OF BIO-OPTICAL PROVINCES IN THE NORTH ATLANTIC DURING JGOFS
Period *Obligations*
08/31/1990-12/31/1993 FY94: \$85,964 TOTAL: \$326,729
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C C TREES HQ/M R LEWIS 33-Oceanography
HQ/W S WILSON

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NAGW 3494 San Diego State University 1784
 SEA.PIG., PRI.PROD. AND SED.OF ORG.MATT.IN THE GULF OF CALI.,AND THE ELNINO-SOUTH OSCILL CYCLE
Period Obligations
 04/12/1993-12/31/1996 FY94: \$104,000 TOTAL: \$114,000
Prin. Invest. NASA Tech. Officer CASE Category
 J L MUELLER HQ/D E WICKLAND 39-Env Sci, NEC
 HQ/A C JANETOS

NAGW 3865 San Diego State University 1785
 SAN DIEGO ST. UNIV FOUND - MECHANISM AND CONTROL OF ROOT GRAVITROPISM IN MAIZE
Period Obligations
 02/04/1994-07/31/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 D RAYLE HQ/T W HALSTEAD 51-Biological Sci

NAS 5-31753 San Diego State University 1786
 SEAWIFS VALIDATION SUPPORT
Period Obligations
 06/26/1992-06/25/1995 FY94: \$183,640 TOTAL: \$689,640
Prin. Invest. NASA Tech. Officer CASE Category
 J L MUELLER GSFC/C MCCLAIN 33-Oceanography

NCA 2-786 San Diego State University 1787
 STUDY OF ORGANIZED STRUCTURES IN THE POST-STALL FL OW OVER WINGS
Period Obligations
 02/05/1993-02/14/1995 FY94: \$36,522 TOTAL: \$73,044
Prin. Invest. NASA Tech. Officer CASE Category
 J KATZ ARC/J ROSS 41-Aero Engr

NGT 00-030-134 San Diego State University 1788
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 09/12/1992-08/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 P W LEADLEY HQ/G ASRAR 39-Env Sci, NEC
 J REYNOLDS HQ/D M BUTLER

NAGW 2212 San Francisco State University 1789
 DETERMINATION OF THE OPTICAL CONSTANTS OF HYDRATES , CARBONATES, SULFATES, AND NITRATES
Period Obligations
 10/09/1990-06/30/1995 FY94: \$28,000 TOTAL: \$112,000
Prin. Invest. NASA Tech. Officer CASE Category
 J B ORENBERG HQ/T A MAXWELL 32-Geological Sci

NAGW 3182 San Francisco State University 1790
 NAGW-3182/SAN FRANCISCO STATE UNIV/A NEXT-GENERATI ON SEARCH FOR EXTRA-SOLAR PLANETS
Period Obligations
 08/28/1992-09/30/1994 FY94: \$151,887 TOTAL: \$315,081
Prin. Invest. NASA Tech. Officer CASE Category
 G W MARCY HQ/J K ALEXANDER 11-Astronomy
 HQ/D A HOLLAND

NCA 2-639 San Francisco State University 1791
 EFFECTS OF HYDROGEN ON CANDIDATE MATERIALS FOR THE NATIONAL AEROSPACE PLANE
Period Obligations
 07/22/1991-07/31/1993 FY94: \$0 TOTAL: \$80,000
Prin. Invest. NASA Tech. Officer CASE Category
 M M ABO-ELL-ATA ARC/H NELSON 46-Mech Engr

NCA 2-712 San Francisco State University 1792
 CHARACTERIZATION OF MARS SOIL ANALOG MINERALS AND MINERAL MIXTURES BY DIFFERENT THERMAL ANALYSIS
Period Obligations
 04/20/1992-01/31/1994 FY94: \$0 TOTAL: \$39,999
Prin. Invest. NASA Tech. Officer CASE Category
 J ORENBERG ARC/G CARLE 12-Chemistry

NCA 2-764 San Francisco State University 1793
 DETERMINATION OF POLAR STRATOSPHERIC CLOUD ONSET O VER ANTARCTICA USING CLOUD TOP TEMPERATURE
Period Obligations
 11/17/1992-11/30/1994 FY94: \$40,000 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
 O GARCIA ARC/S HIPSKIND 31-Atmos Sci
 T FOSCHI
 J MONTEVERDI

NCA 2-801 San Francisco State University 1794
 CONCEPTUAL DESIGN OF A HUMAN HABITAT FOR THE 52' D IAMETER CENTRIFUGE AT NASA AMES RESEARCH CENTER
Period Obligations
 04/02/1993-06/30/1993 FY94: \$0 TOTAL: \$9,990
Prin. Invest. NASA Tech. Officer CASE Category
 P PFAELZER ARC/G MULENBURG 42-Astro Engr
 N OWEN

NCA 2-808 San Francisco State University 1795
 NETWORK REQUIREMENTS TO SUPPORT DISTRIBUTED COMPUT ER VISUALIZATION AND CENTRAL STORAGE
Period Obligations
 04/14/1993-12/31/1993 FY94: \$0 TOTAL: \$16,492
Prin. Invest. NASA Tech. Officer CASE Category
 H SHAHNASSER ARC/P GRAMS 22-Computer Science

NCA 2-835 San Francisco State University 1796
 PRELIMINARY DESIGN OF HUMAN HABITAT AREAS FOR THE 52' DIAMETER CENTRIFUGE AT NASA-AMES RESEARCH CTR
Period Obligations
 08/16/1993-01/31/1994 FY94: \$0 TOTAL: \$14,850
Prin. Invest. NASA Tech. Officer CASE Category
 P PFAELZER ARC/G M MULENBURG 46-Mech Engr

NCC 2-672 San Francisco State University 1797
 THE SPECTROSCOPY AND REACTIVITY OF MINERAL ANALOGS OF THE MARTIAN SOIL
Period Obligations
 06/07/1990-09/30/1992 FY94: \$4 TOTAL: \$151,500
Prin. Invest. NASA Tech. Officer CASE Category
 J B ORENBERG ARC/G C CARLE 59-Life Sci, NEC
 T L ROUSH
 A BANIN

NCC 2-727 San Francisco State University 1798
 PROPERTIES OF THE MARTIAN SOIL: ANALYSIS OF AVAI LABLE SPECTROSCOPIC DATASETS
Period Obligations
 06/30/1991-06/30/1993 FY94: \$0 TOTAL: \$103,395
Prin. Invest. NASA Tech. Officer CASE Category
 J MONTEVERDI ARC/J B POLLACK 59-Life Sci, NEC
 T ROUSH

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCC 2-808 San Francisco State University 1799
THE BIOGENIC ELEMENTS IN MARS SOIL
Period Obligations
07/01/1993-12/31/1994 FY94: \$38,440 TOTAL: \$116,421
Prin. Invest. NASA Tech. Officer CASE Category
J B ORENBURG ARC/G C CARLE 59-Life Sci, NEC

NCC 2-815 San Francisco State University 1800
MODELING THE REFLECTANCE SPECTRA OF CONDENSED VOLA
TILES ON PLANETARY SURFACES
Period Obligations
08/06/1993-06/30/1995 FY94: \$22,489 TOTAL: \$62,036
Prin. Invest. NASA Tech. Officer CASE Category
T L ROUSH ARC/J B POLLACK 11-Astronomy
J P MONTEVERDI ARC/D P CRUIKSHANK

NCC 2-5037 San Francisco State University 1801
FULL-SCALE MODEL OF HUMAN HABITAT FOR THE 52 FT DIAMETER
CENTRIFUGE AT AMES
Period Obligations
02/03/1994-06/30/1994 FY94: \$14,983 TOTAL: \$14,983
Prin. Invest. NASA Tech. Officer CASE Category
P PFAELZER ARC/G M MULENBURG 49-Engr, NEC
N OWEN

NCC 2-5045 San Francisco State University 1802
LOW LATENCYMULTIMEDIA APPLICATIONS AND THEIR NETWO RK
REQUIREMENTS
Period Obligations
04/11/1994-05/31/1995 FY94: \$27,914 TOTAL: \$27,914
Prin. Invest. NASA Tech. Officer CASE Category
H SHAHNASSER ARC/P GRAMS 22-Computer Science

NCC 2-5053 San Francisco State University 1803
STUDY OF APPLIED PHYSICAL CHARACTERISTICS OF THERM AL
RESISTANT MATERIALS
Period Obligations
05/06/1994-09/30/1994 FY94: \$8,000 TOTAL: \$8,000
Prin. Invest. NASA Tech. Officer CASE Category
G FISHER ARC/D LEISER 19-Phys Sci, NEC
ARC/L FRANKLIN

NAG 2-537 San Jose State University 1804
INCORPORATION OF METEOROLOGICAL INFORMATION INTO A IR
TRAFFIC CONTROL AUTOMATION
Period Obligations
09/01/1988-12/31/1992 FY94: TOTAL: \$489,977
Prin. Invest. NASA Tech. Officer CASE Category
W F NEDELL ARC/T J DAVIS 41-Aero Engr
ARC/H ERZBERGER

NAG 2-681 San Jose State University 1805
CORRELATION STUDIES OF PIONEER VENUS IMAGERY OBTA INED
FROM PV EXPERIMENTS W/NEAR-IR IMAGERY
Period Obligations
10/26/1990-09/30/1992 FY94: \$0 TOTAL: \$52,380
Prin. Invest. NASA Tech. Officer CASE Category
A B RAGENT ARC/L E LASHER 11-Astronomy
ARC/R O FIMMEL

NAG 2-848 San Jose State University 1806
DEVELOPMENT OF PROCESSING TECHNIQUES FOR ADVANCED
THERMAL PROTECTION MATERIALS
Period Obligations
06/17/1993-05/31/1995 FY94: \$169,200 TOTAL: \$235,869
Prin. Invest. NASA Tech. Officer CASE Category
G SELVADURAY ARC/D B LEISER 47-Materials Engr

NAG 2-915 San Jose State University 1807
VISUALIZATION OF TENSOR FIELDS
Period Obligations
07/13/1994-04/30/1995 FY94: \$19,975 TOTAL: \$19,975
Prin. Invest. NASA Tech. Officer CASE Category
R K DODD ARC/T A LASKINSKI 22-Computer Science
R ALPERIN

NAG 5-2354 San Jose State University 1808
GAMMA-RAY EMITTERS PRODUCED BY HIGH ENERGY CHARGED
PARTICLES
Period Obligations
08/25/1993-09/14/1994 FY94: \$0 TOTAL: \$14,900
Prin. Invest. NASA Tech. Officer CASE Category
P ENGLERT GSFC/J I TROMBKA 11-Astronomy
GSFC/S R FLOYD

NAGW 3525 San Jose State University 1809
THEORETICAL STUDIES OF POLAR STRATOSPHERIC CLOUDS AND
THE BACKGROUND STRATOSPHERE SULFATE AEROSOL
Period Obligations
04/15/1993-02/28/1995 FY94: \$34,996 TOTAL: \$72,709
Prin. Invest. NASA Tech. Officer CASE Category
P HAMILL HQ/J A KAYE 31-Atmos Sci
HQ/R E MURPHY

NAGW 3656 San Jose State University 1810
RADIO OCCULTATION INVESTIGATION OF THE RINGS
Period Obligations
06/17/1993-02/28/1995 FY94: \$45,000 TOTAL: \$96,000
Prin. Invest. NASA Tech. Officer CASE Category
E A MAROUF HQ/J M BOYCE 32-Geological Sci

NAS 5-31746 San Jose State University 1811
ACQUISITION OF OPTICAL MOORING AND SHIPBOARD
SUBMERSIBLE RADIOMETER SYSTEM
Period Obligations
05/12/1992-05/11/1995 FY94: \$316,776 TOTAL: \$2,313,676
Prin. Invest. NASA Tech. Officer CASE Category
W BROENKOW GSFC/C MCCLAIN 33-Oceanography

NCA 2-178 San Jose State University 1812
IMPLEMENTING PUBLIC LAW 89-329 (WORK-STUDY)
Period Obligations
11/01/1986-09/30/1993 FY94: TOTAL: \$300,716
Prin. Invest. NASA Tech. Officer CASE Category
R SHOEMAKER ARC/S STANLEY 99-Multi-Discip

NCA 2-295 San Jose State University 1813
RESEARCH AND DEVELOPMENT PROGRAM
Period Obligations
04/15/1988-04/30/1994 FY94: \$512,006 TOTAL: \$10,938,413
Prin. Invest. NASA Tech. Officer CASE Category
N BUSSANI ARC/R L PIKE 99-Multi-Discip
ARC/D CUNNINGHAM

NCA 2-555 San Jose State University 1814
JOINT USE OF RESOURCES FOR OPERATION OF THE NASA- AMES
UNIV. CONSORTIUM OFFICE
Period Obligations
11/30/1990-09/30/1995 FY94: \$153,000 TOTAL: \$627,051
Prin. Invest. NASA Tech. Officer CASE Category
S K GIBSON ARC/L A MILOV 99-Multi-Discip
A C CHU

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCA 2-651 San Jose State University 1815
PYROLYSIS OF CARBON-CONTAINING COMPOUNDS
Period Obligations
08/26/1991-08/25/1993 FY94: TOTAL: \$79,921
Pnn. Invest. NASA Tech. Officer CASE Category
J F BECKER ARC/J VALENTIN 13-Physics

NCA 2-677 San Jose State University 1816
ANALYSIS OF BOUNDARY LAYER TRANSITION FOR SWEEP WING DESIGN
Period Obligations
01/21/1991-03/31/1993 FY94: TOTAL: \$33,253
Pnn. Invest. NASA Tech. Officer CASE Category
R V WESTPHAL ARC/R A KENNELLY 41-Aero Engr

NCA 2-683 San Jose State University 1817
AN EXPERIMENTAL STUDY OF SPANWISC BLOWING ON DELTA WINGS
Period Obligations
02/04/1992-08/31/1993 FY94: \$0 TOTAL: \$23,000
Pnn. Invest. NASA Tech. Officer CASE Category
N MOURTOS ARC/D RIDDLE 41-Aero Engr

NCA 2-710 San Jose State University 1818
PARTICIPATION IN SPADE CAMPAIGN
Period Obligations
04/27/1992-10/31/1993 FY94: TOTAL: \$9,999
Pnn. Invest. NASA Tech. Officer CASE Category
P HAMILL ARC/B TOON 13-Physics

NCA 2-720 San Jose State University 1819
NMR ANALYSIS AND BIOFILM STUDY OF SURFACE MODIFIED POLYMERS
Period Obligations
05/26/1992-03/15/1993 FY94: TOTAL: \$39,985
Pnn. Invest. NASA Tech. Officer CASE Category
J J PESEK ARC/M GOLUB 12-Chemistry

NCA 2-735 San Jose State University 1820
EVOLUTION OF GRAVITATIONALLY UNSTABLE PROTOSTELLAR DISK
Period Obligations
07/20/1992-08/25/1993 FY94: TOTAL: \$9,066
Pnn. Invest. NASA Tech. Officer CASE Category
L TOMLEY ARC/P CASSEN 11-Astronomy

NCA 2-740 San Jose State University 1821
DETERMINATION OF DUST OPTICAL DEPTH AND PHOTOMETRIC PROPERTIES FROM VIKING LANDER IMAGES
Period Obligations
07/22/1992-08/09/1994 FY94: TOTAL: \$78,853
Pnn. Invest. NASA Tech. Officer CASE Category
A F BRIDGER ARC/J B POLLACK 31-Atmos Sci

NCA 2-741 San Jose State University 1822
A K-DISTRIBUTION METHOD FOR COMPUTING ATMOSPHERIC RADIATIVE TRANSFER FOR CLIMATE STUDIES
Period Obligations
08/05/1992-09/15/1993 FY94: TOTAL: \$39,927
Pnn. Invest. NASA Tech. Officer CASE Category
P HAMILL ARC/B TOON 31-Atmos Sci

NCA 2-744 San Jose State University 1823
ATMOSPHERIC SOUNDINGS INSUPPORT OF THE STRATOSPHERIC EIC, AEROSOLS AND DYNAMICS EXPEDITION (SPADE)
Period Obligations
08/13/1992-08/31/1993 FY94: TOTAL: \$11,512
Pnn. Invest. NASA Tech. Officer CASE Category
J GOODMAN ARC/S HIPSKIND 31-Atmos Sci

NCA 2-756 San Jose State University 1824
JOINT USE OF RESOURCES FOR OPERATION OF THE AMES AEROSPACE ENCOUNTER
Period Obligations
10/09/1992-09/30/1993 FY94: TOTAL: \$176,645
Pnn. Invest. NASA Tech. Officer CASE Category
J BEARD ARC/T B CLAUSEN 99-Multi-Discip
J W BOYD

NCA 2-784 San Jose State University 1825
A STUDY OF GRAVITY WAVES IN THE ATMOSPHERE OF VENUS USING PIONEER VENUS ATMOSPHERIC PROBE DATA
Period Obligations
02/01/1993-08/31/1994 FY94: \$0 TOTAL: \$28,653
Pnn. Invest. NASA Tech. Officer CASE Category
A BRIDGER ARC/R E YOUNG 11-Astronomy

NCA 2-785 San Jose State University 1826
HYDROSTATIC MOUNTAIN WAVES IN THE MARTIAN ATMOSPHERE: A THEORETICAL STUDY
Period Obligations
02/05/1993-08/31/1994 FY94: \$25,981 TOTAL: \$57,981
Pnn. Invest. NASA Tech. Officer CASE Category
A BRIDGER ARC/R E YOUNG 11-Astronomy

NCA 2-809 San Jose State University 1827
ANALYSIS OF BOUNDARY LAYER TRANSITION FOR SWEEP WING DESIGN - SECOND PHASE
Period Obligations
04/14/1993-05/27/1994 FY94: \$0 TOTAL: \$39,306
Pnn. Invest. NASA Tech. Officer CASE Category
R V WESTPHAL ARC/R A KENNELLY JR. 41-Aero Engr

NCA 2-814 San Jose State University 1828
WATER VAPOR TRANSPORT AND SOURCE IDENTIFICATION IN THE MARTIAN ATMOSPHERE
Period Obligations
05/12/1993-01/21/1995 FY94: \$0 TOTAL: \$31,607
Pnn. Invest. NASA Tech. Officer CASE Category
A F BRIDGER ARC/R M HABERLE 11-Astronomy

NCA 2-817 San Jose State University 1829
INVESTIGATION OF MARTIAN ATMOSPHERIC DYNAMICAL RESPONSE TO GLOBAL DUST STORMS
Period Obligations
05/21/1993-07/21/1994 FY94: \$0 TOTAL: \$39,889
Pnn. Invest. NASA Tech. Officer CASE Category
A F BRIDGER ARC/J B POLLACK 31-Atmos Sci

NCA 2-834 San Jose State University 1830
MEASUREMENT OF CARBON ISOTOPES IN CALCITE
Period Obligations
08/16/1993-08/31/1995 FY94: \$40,000 TOTAL: \$80,000
Pnn. Invest. NASA Tech. Officer CASE Category
J BECKER ARC/J VALENTIN 31-Atmos Sci

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCC 2-3 San Jose State University 1831
STUDY OF FIBER MATERIALS USED IN TEMPERATURE RESISTANT
FIBER REINFORCED COMPOSITES
Period Obligations
06/01/1979-05/31/1994 FY94: \$0 TOTAL: \$662,376
Prin. Invest. NASA Tech. Officer CASE Category
R N ANDERSON ARC/S R RICCITIELLO 47-Materials Engr
ARC/H GOLDSTEIN

NCC 2-466 San Jose State University 1838
STUDIES OF PLANETARY ATMOSPHERES ASSOCIATED WITH
EXPERIMENTS ON THE GALILEO JUPITER PROBE EXPERIMEN
Period Obligations
03/01/1987-12/31/1994 FY94: \$88,231 TOTAL: \$734,421
Prin. Invest. NASA Tech. Officer CASE Category
B RAGENT ARC/L E LASHER 19-Phys Sci, NEC
J GOODMAN ARC/R E YOUNG

NCC 2-168 San Jose State University 1832
EXPERIMENTAL STUDIES OF THE DISTRIBUTION OF MINOR
CONSTITUENTS IN THE ATMOSPHERE
Period Obligations
01/01/1982-12/31/1994 FY94: \$232,330 TOTAL: \$1,759,090
Prin. Invest. NASA Tech. Officer CASE Category
J GOODMAN ARC/R L CHAN 31-Atmos Sci

NCC 2-471 San Jose State University 1839
STUDIES OF THE ATMOSPHERE OF VENUS AND WORK ON
THEATMOSPHERIC STRUCTURE EXPERIMENT OF THE GALILEO JU
Period Obligations
04/01/1987-06/30/1995 FY94: \$97,506 TOTAL: \$774,521
Prin. Invest. NASA Tech. Officer CASE Category
P LESTER ARC/L E LASHER 31-Atmos Sci
A SEIFF ARC/R E YOUNG

NCC 2-195 San Jose State University 1833
DEVELOPMENT OF ANALYTICAL TECHIQUES FOR THE ANALYS IS
OF FIBER MATERIALS
Period Obligations
08/01/1982-05/31/1993 FY94: \$0 TOTAL: \$691,904
Prin. Invest. NASA Tech. Officer CASE Category
G SELVADURAY ARC/S R RICCITIELLO 47-Materials Engr
ARC/D LEISER

NCC 2-527 San Jose State University 1840
STUDIES OF PLANETARYATMOSPHERES ASSOCIATED WITH
THPIONEER VENUS ORBITER AND GALILEO PROBE TO JUPITER
Period Obligations
01/15/1988-01/14/1994 FY94: \$0 TOTAL: \$453,647
Prin. Invest. NASA Tech. Officer CASE Category
L COLIN ARC/J W DYER 19-Phys Sci, NEC
P F LESTER ARC/R O FIMMEL

NCC 2-211 San Jose State University 1834
TROPOSPHERIC - STRATOSPHERIC MEASUREMENT STUDIES
Period Obligations
09/22/1987-04/30/1995 FY94: \$106,505 TOTAL: \$1,015,274
Prin. Invest. NASA Tech. Officer CASE Category
J GOODMAN ARC/K R CHAN 31-Atmos Sci
S W BOWEN ARC/S G SCOTT

NCC 2-665 San Jose State University 1841
RADIATIVE TRANSFER MODELING
Period Obligations
04/20/1990-03/31/1995 FY94: \$129,820 TOTAL: \$469,541
Prin. Invest. NASA Tech. Officer CASE Category
P HAMILL ARC/O B TOON 31-Atmos Sci
S A KINNE

NCC 2-315 San Jose State University 1835
AN INVESTIGATION OF CLEAR AIR TURBULENCE INCIDENTS
INVOLVING WIDE BODIED AIRCRAFT
Period Obligations
11/01/1987-10/14/1994 FY94: \$44,000 TOTAL: \$300,885
Prin. Invest. NASA Tech. Officer CASE Category
P F LESTER ARC/R E BACH 31-Atmos Sci
ARC

NCC 2-687 San Jose State University 1842
OBSERVATIONAL STUDY OF SOLAR SYSTEM PLASMAS
Period Obligations
07/31/1990-07/14/1995 FY94: \$113,256 TOTAL: \$533,279
Prin. Invest. NASA Tech. Officer CASE Category
P HAMILL ARC/A BARNES 11-Astronomy
P R GAZIS

NCC 2-327 San Jose State University 1836
AERO-SPACE HUMAN FACTORS
Period Obligations
10/01/1984-01/31/1995 FY94: \$1,153,141 TOTAL: \$8,539,268
Prin. Invest. NASA Tech. Officer CASE Category
K JORDAN ARC/R K DISMUKES 69-Psych, NEC

NCC 2-703 San Jose State University 1843
PATTERN BARNIV RECOGNITION AND SIGNAL PROCESSING BY
NEURAL NETWORK
Period Obligations
02/01/1991-12/31/1994 FY94: \$44,960 TOTAL: \$174,195
Prin. Invest. NASA Tech. Officer CASE Category
Y BARAM ARC/Y BARNIV 29-Math/Cmputer,NEC
J C WANG

NCC 2-449 San Jose State University 1837
NEURAL CONNECTIVITY AND IMMUNOCYTOCHEMICAL
STUDIESANATOMICAL SITES RELATED TO NAUSEOGENIC AND
EMETIC
Period Obligations
12/01/1986-02/28/1995 FY94: \$96,997 TOTAL: \$839,235
Prin. Invest. NASA Tech. Officer CASE Category
R A FOX ARC/M L CORCORAN 51-Biological Sci
F D'AMILIO ARC/N G DAUNTON

NCC 2-723 San Jose State University 1844
BEHAVIORAL AND PHYSIOLOGICAL EFFECTS OF HINDLIBM
UNLOADING IN RATS
Period Obligations
07/26/1991-03/31/1995 FY94: \$153,623 TOTAL: \$464,047
Prin. Invest. NASA Tech. Officer CASE Category
R A FOX ARC/M L CORCORAN 51-Biological Sci
F D'AMILIO ARC/N G DAUNTON
L F ENG

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCC 2-756 San Jose State University 1845
SIMULATION OF TROPICAL BIOMASS BURING PLUMES
Period *Obligations*
05/04/1992-04/14/1995 FY94: \$109,018 TOTAL: \$248,706
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P HAMILL ARC/R B CHATFIELD 31-Atmos Sci
J A VASTANO ARC/S S WEGENER

NCC 2-779 San Jose State University 1846
SCIENTIFIC EVALUATION OF HARDWARE AND SUPPORTING STUDIES FOR HARDWARE DEVELOPMENT
Period *Obligations*
02/09/1993-09/30/1994 FY94: \$214,456 TOTAL: \$289,367
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D C HOLLEY ARC/C M WINGET 51-Biological Sci
ARC/G C JAHNS

NCC 2-798 San Jose State University 1847
FLIGHT HUMAN FACTORS
Period *Obligations*
05/12/1993-01/31/1995 FY94: \$1,297,580 TOTAL: \$2,177,978
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K P JORDAN ARC/R K DISMUKES 69-Psych, NEC
D

NCC 2-822 San Jose State University 1848
RODENT ACOUSTIC TOLERANCE STUDY
Period *Obligations*
08/19/1993-06/30/1995 FY94: \$0 TOTAL: \$44,393
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D C HOLLEY ARC/S M HING 51-Biological Sci
ARC/C C JOHNSON

NCC 2-835 San Jose State University 1849
NEUROCOMPUTING
Period *Obligations*
11/22/1993-01/31/1995 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A PELLIONISZ ARC/C C JORGENSEN 22-Computer Science
ARC/E S CHEVERS

NCC 2-858 San Jose State University 1850
TEST TECHNIQUES FOR HYPERSONIC IMPULSE FACILITIES
Period *Obligations*
06/15/1994-03/31/1995 FY94: \$47,232 TOTAL: \$47,232
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R DESAUTEL ARC/G S DEIWERT 41-Aero Engr
ARC/J A CAVOLOWSKY

NCC 2-5047 San Jose State University 1851
DEVELOPMENT OF ANALYTICAL TECHNIQUES FOR THE GEOLOGICAL AND EXOBIOLOGICAL EXPLORATION OF MARS
Period *Obligations*
04/13/1994-03/31/1995 FY94: \$11,978 TOTAL: \$11,978
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E METZGER ARC/M FONDA 32-Geological Sci

NCC 2-5060 San Jose State University 1852
RADIATIVE LOSSES FROM SPIRAL DENSITY WAVE PRODUCTION IN AN ACCRETION DISK OF A STAR
Period *Obligations*
06/03/1994-08/30/1994 FY94: \$4,400 TOTAL: \$4,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P HAMILL ARC/P CASSEN 11-Astronomy

NCC 2-5063 San Jose State University 1853
AN EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF TURBULENCE ON MICROPHONE FOREBODIES
Period *Obligations*
06/03/1994-05/31/1995 FY94: \$34,062 TOTAL: \$34,062
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N J MOURTOS ARC/W C HORNE 41-Aero Engr

NCC 2-5076 San Jose State University 1854
THE MARTIAN DUST CYCLE: INVESTIGATION OF THE SURFACE LIFTING COMPONENT
Period *Obligations*
06/30/1994-07/21/1996 FY94: \$39,999 TOTAL: \$39,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BRIDGER ARC/R M HABERLE 31-Atmos Sci

NCC 2-5077 San Jose State University 1855
AN INVESTIGATION OF STORM TRACKS IN MARS' ATMOSPHERIC CIRCULATION
Period *Obligations*
06/30/1994-07/24/1995 FY94: \$19,869 TOTAL: \$19,869
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BRIDGER ARC/R M HABERLE 31-Atmos Sci

NCC 2-5078 San Jose State University 1856
DIURNAL VARIATIONS OF MARTIAN WATER ICE CLOUDS
Period *Obligations*
06/30/1994-08/09/1995 FY94: \$27,243 TOTAL: \$27,243
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BRIDGER ARC/R HABERLE 31-Atmos Sci

NCC 2-5092 San Jose State University 1857
A THEORETICAL STUDY OF MARTIAN MOUNTAIN WAVES IN ISOSTERIC COORDINATES
Period *Obligations*
08/11/1994-08/31/1995 FY94: \$33,028 TOTAL: \$33,028
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BRIDGER ARC/R E YOUNG 31-Atmos Sci

NCC 2-5093 San Jose State University 1858
COMPARISON OF PIONEER VENUS ENTRY PROBE OBSERVATIONS TO 3-D GRAVITY WAVE THEORY
Period *Obligations*
08/11/1994-02/30/1995 FY94: \$22,560 TOTAL: \$22,560
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BRIDGER ARC/R E WONG 31-Atmos Sci

NCC 2-5094 San Jose State University 1859
INTRASEASONAL AND INTERANNUAL VARIABILITY OF MARS' PRESENT CLIMATE
Period *Obligations*
08/11/1994-02/24/1996 FY94: \$39,166 TOTAL: \$39,166
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BRIDGER ARC/R M HABERLE 31-Atmos Sci

NGT 00-070-227 San Jose State University 1860
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
08/12/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J F BECKER HQ/F C OWENS 13-Physics

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2378 Santa Clara University 1861
BIOLOGICAL IMPLICATIONS OF THE MARS 94 MISSION
Period *Obligations*
04/05/1991-06/30/1995 FY94: \$20,733 TOTAL: \$82,836
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H P KLEIN HQ/J D RUMMEL 51-Biological Sci

NCA 2-527 Santa Clara University 1862
EXPRESSION OF THE FAB A AND FAB B GENES IN OSCILLATORIA LIMNETICA AND RELATED ORGANISMS
Period *Obligations*
06/11/1990-06/10/1993 FY94: \$0 TOTAL: \$28,276
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H P KLEIN ARC/L L JAHNKE 51-Biological Sci

NCA 2-696 Santa Clara University 1863
A DEHUMIDIFICATION SYSTEM FOR LOW GRAVITY-APPLICATION
Period *Obligations*
04/15/1992-01/31/1994 FY94: \$0 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A SAAD ARC/R D MACELROY 46-Mech Engr

NCA 2-697 Santa Clara University 1864
THE APPLICABILITY OF DECENTRALIZED CONTROL PRINCIPLES AND METHODS TO CELSS PROGRAM SYSTEMS CONTROL
Period *Obligations*
03/20/1992-06/01/1994 FY94: \$0 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D D SILJAK ARC/R D MACELROY 46-Mech Engr

NCC 2-644 Santa Clara University 1865
PARALLEL PROCESSING FOR SCIENTIFIC COMPUTATIONS
Period *Obligations*
09/20/1989-06/14/1994 FY94: \$0 TOTAL: \$233,513
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H S ALKHATIB ARC/K G STEVENS JR. 22-Computer Science

NCC 2-793 Santa Clara University 1866
VISION-BASED AIRCRAFT GUIDANCE
Period *Obligations*
04/16/1993-11/21/1993 FY94: \$0 TOTAL: \$40,003
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K MENON ARC/B SRIDHAR 41-Aero Engr
ARC/V L CHENG

NCC 2-841 Santa Clara University 1867
MACHINE-VISION AIDS FOR IMPROVED FLIGHT OPERATIONS
Period *Obligations*
01/27/1994-10/14/1994 FY94: \$80,063 TOTAL: \$80,063
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K MENON ARC/B SRIDHAR 41-Aero Engr
ARC/V H CHENG

NCC 2-5019 Santa Clara University 1868
ROBUST NONLINEAR CONTROL SYSTEM DESIGN METHODS
Period *Obligations*
11/30/1993-11/14/1994 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K MENON ARC/V H CHENG 41-Aero Engr

NCC 2-5068 Santa Clara University 1869
ADVANCED METHODS OF STRUCTURAL AND TRAJECTORY ANALYSES FOR TRANSPORT AIRCRAFT
Period *Obligations*
06/03/1994-09/30/1995 FY94: \$18,758 TOTAL: \$18,758
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M D ARDEMA ARC/H MIURA 41-Aero Engr
ARC/M MOORE

NCC 2-5069 Santa Clara University 1870
ADVANCES IN HYPERSONIC VEHICLE SYNTHESIS WITH APPLICATION TO STUDIES OF ADVANCED THERMAL PROTECTION
Period *Obligations*
06/16/1994-09/30/1995 FY94: \$23,594 TOTAL: \$23,594
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M D ARDEMA ARC/J V BOWLES 41-Aero Engr
ARC/S R RICCIETELLO

NCC 2-5082 Santa Clara University 1871
HIGH PERFORMANCE AND LOW-COST COMPUTING PLATFORMS BASED ON SCI
Period *Obligations*
07/15/1994-03/31/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Q LI ARC/T GRANT 22-Computer Science

NAG 7-1 Sierra College 1872
DEVELOP MGMT CURRICULUM TO TRAIN ENGINEERING STUDENTS
Period *Obligations*
04/14/1994-04/14/1997 FY94: \$440,708 TOTAL: \$440,708
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M DOBECK NRO/A HUSAIN 54-Env Biology

NAG 5-1260 Sonoma State University 1873
HIGH TIME RESOLUTION STUDIES BINARY X-RAY PULSARS
Period *Obligations*
08/04/1989-08/31/1993 FY94: \$0 TOTAL: \$116,020
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L R COMINSKY GSFC/D WEST 12-Chemistry

NAG 5-1621 Sonoma State University 1874
ANALYSIS OF THE VARIABLE SOURCES OBSERVED BY IRAS
Period *Obligations*
06/11/1991-06/14/1994 FY94: \$0 TOTAL: \$122,622
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G G SPEAR GSFC/D WEST 11-Astronomy

NAG 5-1684 Sonoma State University 1875
ROSAT OBSERVATIONS OF MXB 1659-29 AND EXO 0748-676
Period *Obligations*
07/15/1991-09/30/1994 FY94: \$0 TOTAL: \$26,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L R COMINSKY GSFC/R PETRE 11-Astronomy

NAG 5-2032 Sonoma State University 1876
LONG TERM MONITORING OF NEUTRON STAR BINARY SYSTEMS USING BATSE
Period *Obligations*
07/17/1992-07/31/1994 FY94: \$0 TOTAL: \$58,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L R COMINSKY GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 1-1052 **Stanford University** **1877**
AIRCRAFT DESIGN AND OPTIMIZATION USING A KNOWLEDGE
-BASED SYSTEM
Period *Obligations*
09/18/1989-01/31/1993 FY94: TOTAL: \$214,075
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I KROO LARC/J L ROGERS 41-Aero Engr

NAG 1-1494 **Stanford University** **1878**
A ROLE FOR GENETIC ALGORITHMS IN A PRELIMINARY DESIGN
ENVIRONMENT
Period *Obligations*
03/26/1993-09/30/1993 FY94: \$0 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I M KROO LARC/J SOBIESKI 41-Aero Engr

NAG 1-1558 **Stanford University** **1879**
NEW APPROACHES TO MULTIDISCIPLINARY DESIGN AND
OPTIMIZATION NLPN 93-1136
Period *Obligations*
11/30/1993-11/30/1994 FY94: \$186,307 TOTAL: \$186,307
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I M KROO LARC/J F BARTHELEMY 41-Aero Engr
LARC/J C TOWNSEND

NAG 1-1610 **Stanford University** **1880**
THE PHYSICS OF TURBULENCE IN THE BOUNDARY LAYER
Period *Obligations*
04/29/1994-04/24/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S J KLINE LARC/S K ROBINSON 41-Aero Engr

NAG 1-1614 **Stanford University** **1881**
FLOW OVER SWEEP FLAPS AND FLAP TIPS
Period *Obligations*
03/29/1994-03/31/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P BRADSHAW LARC/S K ROBINSON 41-Aero Engr

NAG 2-248 **Stanford University** **1882**
DESIGN OF TESTBED AND EMULATION TOOLS
Period *Obligations*
10/01/1983-01/31/1995 FY94: \$153,486 TOTAL: \$1,459,701
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S F LUNDSTROM ARC/K G STEVENS JR. 22-Computer Science
M J FLYNN ARC/R S LIM
K B TENNAL

NAG 2-581 **Stanford University** **1883**
RESEARCH ON INTELLIGENT SYSTEMS FOR SCIENCE AND E
NGINEERING APPLICATIONS
Period *Obligations*
06/20/1989-10/31/1994 FY94: \$1,273,662 TOTAL: \$6,117,058
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E FIKES ARC/P E FRIEDLAND 22-Computer Science

NAG 2-640 **Stanford University** **1884**
A QUASI-PROCEDURAL, KNOWLEDGE-BASED SYSTEM FOR AI
RCRAFT SYNTHESIS
Period *Obligations*
05/31/1990-12/31/1993 FY94: \$33,491 TOTAL: \$308,491
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I KROO ARC/H MIURA 41-Aero Engr
ARC/G H KIDWELL

NAG 2-673 **Stanford University** **1885**
IN SUPPORT OF PLANETARY DATA SYSTEM
Period *Obligations*
10/02/1990-08/31/1994 FY94: \$7,600 TOTAL: \$355,496
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L TYLER ARC/J N CUZZI 11-Astronomy
M R SHOWALTER

NAG 2-686 **Stanford University** **1886**
RESEARCH CENTER FOR COMPUTATIONAL ELECTROMAGNETIS M
Period *Obligations*
09/07/1990-09/30/1992 FY94: \$0 TOTAL: \$140,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W MACCORMACK ARC/P M GOORJIAN 45-Elec Engr
D R CHAPMAN ARC/A C WOO

NAG 2-701 **Stanford University** **1887**
AUTOMATED ANALYSIS AND DISPLAY OF 3-D DATA SETS
Period *Obligations*
04/12/1991-01/31/1994 FY94: \$0 TOTAL: \$331,479
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L HESSELINK ARC/T A LASINSKI 41-Aero Engr

NAG 2-703 **Stanford University** **1888**
OPEN ARCHITECTURES FOR FORMAL REASONING AND DEDUCTI
VE TECHNOLOGIES FOR SOFTWARE DEVELOPMENT
Period *Obligations*
07/16/1991-04/30/1994 FY94: \$0 TOTAL: \$963,406
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J MCCARTHY ARC/H LUM 22-Computer Science
ARC/D MCKELLAR

NAG 2-759 **Stanford University** **1889**
A THEORETICAL AND EXPEIMENTAL INVESTIGATION OF THE O
BLIQUE FLYING WING
Period *Obligations*
02/11/1992-12/31/1994 FY94: \$20,000 TOTAL: \$220,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I KROO ARC/T J GREGORY 41-Aero Engr
R T JONES

NAG 2-842 **Stanford University** **1890**
CENTER FOR AERONAUTICS AND SPACE INFORMATION SCIENCE
S
Period *Obligations*
06/10/1993-03/31/1995 FY94: \$400,000 TOTAL: \$1,200,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J FLYNN ARC/C H SCHULBACH 45-Elec Engr
ARC/K G STEVENS—JR.

NAG 2-887 **Stanford University** **1891**
TESTING, GENERATING AND EXPLAINING CONTROL PROCEDURE
S FOR REACTIVE HYBRID SYSTEMS
Period *Obligations*
03/01/1994-10/31/1994 FY94: \$299,709 TOTAL: \$299,709
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R M FIKES ARC/P E FRIEDLAND 22-Computer Science

NAG 2-891 **Stanford University** **1892**
AN INTEGRATED ENVIRONMENT FOR EFFICIENT FORMAL DESGN
AND VERIFICATION
Period *Obligations*
03/28/1994-12/31/1994 FY94: \$260,000 TOTAL: \$260,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L DILL ARC/P E FRIEDLAND 22-Computer Science

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAG 2-892 **Stanford University** **1893**
SOFTWARE DEVELOPMENT TECHNOLOGIES FOR REACTIVE, REAL-TIME, AND HYBRID SYSTEMS
Period *Obligations*
03/28/1994-09/30/1994 FY94: \$110,000 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Z MANNA ARC/P E FRIEDLAND 22-Computer Science

NAG 3-1652 **Stanford University** **1901**
INFLUENCE OF GRAVITY ON NUCLEATION GROWTH STABILITY AND STRUCTURE IN ORDERING SOFT SPHERES
Period *Obligations*
07/13/1994-07/12/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A P GAST LERC/G A ZIMMERLI 43-Chem Engr

NAG 2-894 **Stanford University** **1894**
PRESERVATION/RESTORATION OF VOYAGER RADIO SCIENCE DATA
Period *Obligations*
04/22/1994-09/30/1994 FY94: \$14,970 TOTAL: \$14,970
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L TYLER ARC/J N CUZZI 11-Astronomy

NAG 5-476 **Stanford University** **1902**
INVESTIGATIONS OF CONTROLLED ON A NATURALLY OCCURRING WAVE-PARTICLE INTERACTION
Period *Obligations*
10/01/1984-09/30/1993 FY94: \$0 TOTAL: \$1,259,833
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A HELLIWELL GSFC/G D BULLOCK 19-Phys Sci, NEC
GSFC/R A HOFFMAN

NAG 2-910 **Stanford University** **1895**
INVESTIGATION OF INFRA-RED AND NON-EQUILIBRIUM AIR RADIATION
Period *Obligations*
06/21/1994-04/30/1995 FY94: \$39,721 TOTAL: \$39,721
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C H KRUGER ARC/S R LANGHOFF 13-Physics

NAG 5-664 **Stanford University** **1903**
FINE SCALE STRUCTURE OF THE SOLAR CHROMOSPHERIC
Period *Obligations*
05/04/1990-02/28/1995 FY94: \$84,998 TOTAL: \$1,091,854
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J G TIMOTHY GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 2-911 **Stanford University** **1896**
TENSOR FIELD VISUALIZATION
Period *Obligations*
06/23/1994-01/31/1995 FY94: \$95,075 TOTAL: \$95,075
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L HESSELINK ARC/T A LASHINSKI 22-Computer Science

NAG 5-1549 **Stanford University** **1904**
THUNDERSTORMS COUPLING TO THE MAGNETOSPHERE AND ASSOCIATED IONOSPHERIC EFFECTS
Period *Obligations*
04/17/1991-04/30/1995 FY94: \$45,000 TOTAL: \$336,830
Prin. Invest. *NASA Tech. Officer* *CASE Category*
U S INAN GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 3-1040 **Stanford University** **1897**
DEV OF AN OPTICAL DIAGNOSTIC FAC FOR PERF EVAL OF LOW POWER DC ARCJET THRUSTERS
Period *Obligations*
04/28/1989-09/24/1994 FY94: \$0 TOTAL: \$391,768
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A CAPPELLI LERC/L M CARNEY 46-Mech Engr
R K HANSON LERC/F M CURRAN

NAG 5-1605 **Stanford University** **1905**
CELESTIAL GAMMA RAY STUDY
Period *Obligations*
05/20/1991-02/28/1995 FY94: \$386,293 TOTAL: \$2,555,140
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P MICHELSON GSFC/R C HARTMAN 11-Astronomy
GSFC/C E FICHEL

NAG 3-1177 **Stanford University** **1898**
PROPOSED RESEARCH IN INTEGRATED DESIGN
Period *Obligations*
06/28/1990-06/30/1994 FY94: \$0 TOTAL: \$173,217
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M ROCK LERC/P J OUZTS 41-Aero Engr
LERC/C F LORENZO

NAG 5-2036 **Stanford University** **1906**
THEORETICAL STUDIES OF SPECTRA OF GAMMA-RAY BURSTS
Period *Obligations*
07/17/1992-07/31/1993 FY94: \$0 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V PETROSIAN GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 3-1185 **Stanford University** **1899**
QUANTITATIVE PLIF IMAGING IN HIGH-PRESSURE COMBUSTION
Period *Obligations*
06/29/1990-01/12/1995 FY94: \$130,000 TOTAL: \$750,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K HANSON LERC/K S CHUN 46-Mech Engr

NAG 5-2037 **Stanford University** **1907**
GAMMA-RAY EMISSIONS FROM RADIO PULSARS
Period *Obligations*
07/17/1992-11/30/1994 FY94: \$25,000 TOTAL: \$41,433
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W ROMANI GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 3-1475 **Stanford University** **1900**
PROBLEMS IN MICROGRAVITY FLUID MECHANICS: THERMOCAPILLARY INSTABILITIES AND G-JITTER CONVECTION
Period *Obligations*
04/30/1993-05/30/1995 FY94: \$117,320 TOTAL: \$235,248
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G M HOMSY LERC/B S SINGH 19-Phys Sci, NEC

NAG 5-2393 **Stanford University** **1908**
REMOTE SENSING OF HABITAT EDGES AND THEIR EFFECT ON BIODIVERSITY
Period *Obligations*
10/13/1993-10/14/1994 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P EHRLICH GSFC/M L IMHOFF 39-Env Sci, NEC

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 5-2706 **Stanford University** **1909**
X-RAYS FROM A HIGH VELOCITY PULSAR BOW SHOCK PSR
B2224+65
Period *Obligations*
09/07/1994-03/14/1996 FY94: \$15,928 TOTAL: \$15,928
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ROMANI GSFC/R PETRE 11-Astronomy

NAG 8-920 **Stanford University** **1910**
PROTEIN CRYSTAL GROWTH IN LOW GRAVITY
Period *Obligations*
07/10/1992-06/30/1994 FY94: \$0 TOTAL: \$135,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R S FEIGELSON MSFC/M L PUSEY 43-Chem Engr

NAG 8-1088 **Stanford University** **1911**
ATOM INTERFEROMETRY IN A MICROGRAVITY ENVIRONMENT
Period *Obligations*
09/26/1994-08/25/1995 FY94: \$70,000 TOTAL: \$70,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M KASEVICH MSFC/D E NOEVER 11-Astronomy
MSFC/D CARTER

NAG 9-458 **Stanford University** **1912**
ANALYSIS OF HIGH SPATIAL RESOLUTION OF ORGANIC MOLECULES
IN EXTRATERRESTRIAL SAMPLES
Period *Obligations*
07/16/1990-09/01/1994 FY94: \$0 TOTAL: \$157,789
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R N ZARE JSC/I D BROWNE 19-Phys Sci, NEC

NAGW 419 **Stanford University** **1913**
FORMATION OF THE STANFORD CTR FOR AERONAUTICS AND
SPACE INFORMATION SCIENCIS
Period *Obligations*
01/12/1983-11/30/1992 FY94: \$0 TOTAL: \$9,035,006
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M BANKS HQ/L B HOLCOMB 22-Computer Science
M J WISKERCHEN

NAGW 965 **Stanford University** **1914**
GRADUATE HYPERSONIC TRAINING/RESEARCH
Period *Obligations*
08/01/1986-10/31/1992 FY94: \$0 TOTAL: \$1,294,435
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D R CHAPMAN HQ/S M WANDER 13-Physics
D BAGANOFF HQ/R A GRAVES

NAGW 1068 **Stanford University** **1915**
INFLUENCE OF SOIL FERTILITY AND DISTURBANCE
Period *Obligations*
03/15/1987-03/14/1995 FY94: \$74,001 TOTAL: \$517,245
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P VITOUSEK HQ/M M AVERNER 51-Biological Sci

NAGW 1582 **Stanford University** **1916**
PRECIPITATION OF RADIATION BELT PARTICLES
Period *Obligations*
12/27/1988-02/28/1995 FY94: \$75,000 TOTAL: \$373,693
Prin. Invest. *NASA Tech. Officer* *CASE Category*
U S INAN HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1680 **Stanford University** **1917**
MECHANISMS OF GENERATION EVOLUTION AND PROPAGATION OF
VLF
Period *Obligations*
03/03/1989-02/28/1995 FY94: \$66,000 TOTAL: \$393,422
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A HELLIWELL HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1790 **Stanford University** **1918**
MAGNETOHYDRODYNAMIC STUDIES OF SOLAR WIND FLOW
Period *Obligations*
08/08/1989-09/30/1993 FY94: \$0 TOTAL: \$156,271
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R SPREITER HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1918 **Stanford University** **1919**
INVESTIGATION OF CONTRASTING PORTIONS OF THE WESTERN
NORTH AMERICAN CONSTRUCTION MARGIN WHITE INYO
Period *Obligations*
05/05/1990-11/30/1993 FY94: \$0 TOTAL: \$155,444
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W G ERNST HQ/M BALTUCK 32-Geological Sci
HQ/T J PIEPER

NAGW 1971 **Stanford University** **1920**
RESEARCH IN PLANETARY ATMOSPHERE
Period *Obligations*
03/13/1990-09/30/1994 FY94: \$97,000 TOTAL: \$452,504
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V R ESHLEMAN HQ/J T BERGSTRALH 11-Astronomy

NAGW 1976 **Stanford University** **1921**
STUDIES OF THE IMPULSIVE PHASE OF SOLAR FLARES BASED
ON SMM AND OTHER DATA
Period *Obligations*
01/20/1990-10/31/1994 FY94: \$109,237 TOTAL: \$460,237
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V PETROSIAN HQ/J D BOHLIN 13-Physics
HQ/S KANE

NAGW 2140 **Stanford University** **1922**
RADAR STUDIES OF LUNAR AND PLANETARY SURFACES
Period *Obligations*
05/30/1990-10/31/1994 FY94: \$49,879 TOTAL: \$232,879
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L TYLER HQ/T A MAXWELL 32-Geological Sci

NAGW 2159 **Stanford University** **1923**
REMOTE SENSING AND ECOLOGICAL POPULATION DYNAMICS:
INTERTIDAL BARNACLE SPECIES IN CAL. CURRENT SYS
Period *Obligations*
07/27/1990-04/30/1993 FY94: \$0 TOTAL: \$319,835
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J ROUGHGARDEN HQ/M M AVERNER 54-Env Biology

NAGW 2265 **Stanford University** **1924**
PHYSICS OF SOLAR ACTIVITY
Period *Obligations*
12/14/1990-11/30/1994 FY94: \$196,474 TOTAL: \$632,813
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P A STURROCK HQ/W WAGNER 13-Physics
HQ/K LANG

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2290 **Stanford University** **1925**
TOPICS IN PLASMA ASTROPHYSICS
Period *Obligations*
12/14/1990-10/31/1995 FY94: \$45,000 TOTAL: \$200,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P A STURROCK HQ/L J KALUZIENSKI 13-Physics

NAGW 2963 **Stanford University** **1933**
NEUTRON STARS POPULATIONS IN X-RAYS AND GAMMA RAY S
Period *Obligations*
03/20/1992-02/28/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ROMANI HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 2437 **Stanford University** **1926**
NAGW-2437/STANFORD UNIV/ANALYSIS OF VOYAGER RADIO
OCULTATION OBSERVATIONS OF TRITON
Period *Obligations*
06/20/1991-06/30/1994 FY94: \$0 TOTAL: \$421,073
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L TYLER HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 3049 **Stanford University** **1934**
NITROGEN AND CARBON TRACE GAS FLUXES FROM TROPICAL
AGRICULTURE
Period *Obligations*
04/17/1992-04/30/1994 FY94: \$0 TOTAL: \$240,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M VITOUSEK HQ/A C JANETOS 39-Env Sci, NEC
HQ/D E WICKLAND

NAGW 2442 **Stanford University** **1927**
NAGW-2442/STANFORD UNIV/INVESTIGATION OF ATMOSPHER IC
WAVES ON NEPTUNE
Period *Obligations*
07/01/1991-02/28/1994 FY94: \$0 TOTAL: \$224,601
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V R ESHLEMAN HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 3223 **Stanford University** **1935**
NAGW-3223/STANFORD UNIV/MULTIVARIATE DISTRIBUTIONS AND
CORRELATIONS OF ASTROPHYSICAL PARAMETERS
Period *Obligations*
10/21/1992-09/14/1993 FY94: \$0 TOTAL: \$22,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V PETROSIAN HQ/G R RIEGLER 11-Astronomy

NAGW 2502 **Stanford University** **1928**
NAGW-2502/STANFORD UNIV/STRUCTURE OF SOLAR MAGNETI C
AND VELOCITY FIELDS
Period *Obligations*
07/01/1991-01/31/1997 FY94: \$165,000 TOTAL: \$596,945
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P H SCHERRER HQ/W J WAGNER 45-Elec Engr
HQ/K LANG

NAGW 3375 **Stanford University** **1936**
SPACEBORNE INSTRUMENT TECHNOLOGY DEVELOPMENT FOR B
ISTATIC RADAR STUDIES OF THE PLANETS
Period *Obligations*
02/09/1993-03/31/1995 FY94: \$160,000 TOTAL: \$330,938
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L TYLER HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 2776 **Stanford University** **1929**
THE SIXTH NATIONAL CONFERENCE OF BLACK PHYSICS STU
DENTS
Period *Obligations*
11/25/1991-09/30/1992 FY94: \$0 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A B WALKER HQ/J K ALEXANDER 13-Physics
C W BATES HQ/D A HOLLAND

NAGW 3443 **Stanford University** **1937**
INVESTIGATION OF ATMOSPHERIC WAVES ON VENUS
Period *Obligations*
03/10/1994-03/14/1996 FY94: \$34,000 TOTAL: \$79,932
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L TYLER HQ/J BERGSTRAHL 31-Atmos Sci

NAGW 2793 **Stanford University** **1930**
SATELLITE TEST OF THE EQUIVALENCE PRINCIPLE STEP
Period *Obligations*
12/13/1991-12/31/1993 FY94: \$0 TOTAL: \$1,402,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C W EVERITT HQ/B M CARPENTER 13-Physics

NAGW 3489 **Stanford University** **1938**
DEVEL. OF A BROADBAND HIGH ENER. GAMMA-RAY TELE. U SING
SILI. STRIP DETECTORS
Period *Obligations*
05/13/1994-09/30/1994 FY94: \$0 TOTAL: \$99,995
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P F MICHELSON HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 2871 **Stanford University** **1931**
HEATING AND IONIZATION OF THE LOWER IONOSPHERE BY
LIGHTNING DISCHARGES
Period *Obligations*
01/31/1992-03/31/1995 FY94: \$78,161 TOTAL: \$216,394
Prin. Invest. *NASA Tech. Officer* *CASE Category*
U INAN HQ/D L RESONER 13-Physics
HQ/J D BOHLIN

NAGW 3629 **Stanford University** **1939**
ANALYSES AT HIGH SPETIAL RESOLUTION OF ORGANIC MOL
ECULES IN EXTRATERRESTRIAL SAMPLES
Period *Obligations*
06/03/1993-07/31/1995 FY94: \$44,033 TOTAL: \$90,383
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ZARE HQ/J BOYCE 32-Geological Sci

NAGW 2894 **Stanford University** **1932**
ANALYSIS OF WHISTLER-MODE WAVES OBSERVED AT NEPTUN E
Period *Obligations*
02/19/1992-03/31/1994 FY94: \$0 TOTAL: \$89,765
Prin. Invest. *NASA Tech. Officer* *CASE Category*
U S INAN HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 3702 **Stanford University** **1940**
INFERENCE OF SURFACE PROPERTIES FROM COMPOSITE RAD AR
SCATTERING FUNCTIONS
Period *Obligations*
09/02/1993-06/30/1995 FY94: \$57,600 TOTAL: \$137,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L TYLER HQ/J T BERGSTRAHL 32-Geological Sci

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAS 1-18778 **Stanford University** **1941**
STUDY OF DAMAGE TOLERANCE OF THERMOPLASTIC COMPOSITES
Period *Obligations*
12/16/1988-09/15/1993 FY94: \$0 TOTAL: \$449,985
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G S SPRINGER LARC/C POE 13-Physics
LARC/C E HARRIS

NAS 5-29389 **Stanford University** **1942**
MAMA DETECTORS FOR THE HST IMAGING SPECTROGRAPH SUPPORT AND DEVELOPMENT
Period *Obligations*
12/15/1986-03/14/1994 FY94: \$0 TOTAL: \$3,764,092
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J G TIMOTHY GSFC/D VITAGLIANO 41-Aero Engr

NAS 5-30386 **Stanford University** **1943**
MICHAELSON DOPPLER IMAGER ISTP SOHO PROGRAM
Period *Obligations*
11/01/1988-07/01/1995 FY94: \$6,487,200 TOTAL: \$53,487,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H SCHERRER GSFC/J GERVIN 13-Physics

NAS 5-30387 **Stanford University** **1944**
CO-I TO SUPPORT SUMER AND CDS INVESTIGATIONS SOHO
Period *Obligations*
11/01/1988-08/15/1995 FY94: TOTAL: \$22,270,239
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J TIMOTHY GSFC/J GERVIN 42-Astro Engr

NAS 5-31726 **Stanford University** **1945**
EOS - 'BIOSPHERE-ATMOSPHERE INTERACTIONS' STUDY
Period *Obligations*
10/24/1991-12/31/1999 FY94: \$196,500 TOTAL: \$549,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H MOONEY GSFC/P SELLERS 31-Atmos Sci
P VITOUSEK

NAS 8-36125 **Stanford University** **1946**
GRAVITY PROBE B SHUTTLE FLIGHT EXPERIMENT ENGINEERING DEVELOPMENT (GP8B) PHASE I DEFINITION
Period *Obligations*
03/29/1985-03/31/1995 FY94: \$39,475,059 TOTAL: \$178,963,468
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C W EVERITT MSFC/J S RICHARDS 13-Physics
D DEDRA MSFC/R A POTTER
W FAIRBANK

NCA 2-578 **Stanford University** **1947**
COMPUTATIONAL STUDY OF UNSTEADY SEPERATED FLOW AROUND MOVING SLENDER BODIES
Period *Obligations*
12/11/1990-09/30/1992 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L HESSELINK ARC/L B SCHIFF 41-Aero Engr

NCA 2-594 **Stanford University** **1948**
INTEGRATED HELICOPTER/ENGINE CONTROL WITH VARIABLE ROTOR SPEED
Period *Obligations*
03/01/1991-09/30/1993 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M ROCK ARC/J A SCHROEDER 41-Aero Engr
ARC/D WATSON

NCA 2-595 **Stanford University** **1949**
AEROASSIST FLIGHT EXPERIMENT (AFE) WAKE FLOW PREDICTION
Period *Obligations*
03/08/1991-09/30/1993 FY94: \$0 TOTAL: \$56,871
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W MACCORMACK ARC/G S DEIWERT 41-Aero Engr

NCA 2-607 **Stanford University** **1950**
LASER BASED ABSORPTION DIAGNOSTICS FOR SHOCK TUBE AND SHOCK TUNNEL FLOWS
Period *Obligations*
04/26/1991-04/30/1993 FY94: \$0 TOTAL: \$79,992
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K HANSON ARC/J A CAVOLOWSKY 41-Aero Engr
ARC/G S DEIWERT

NCA 2-632 **Stanford University** **1951**
GRAPHICAL ANALYSIS OF LARGE FLUID FLOW DATA SETS
Period *Obligations*
07/05/1991-06/23/1993 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L HESSELINK ARC/L SCHIFF 41-Aero Engr

NCA 2-638 **Stanford University** **1952**
RADIATION STUDIES OF HIGHLY ENERGIZED SCHOCK-HEATED GASES
Period *Obligations*
07/19/1991-10/31/1993 FY94: \$0 TOTAL: \$70,154
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D BERSHADER ARC/S P SHARMA 41-Aero Engr
ARC/G S DEIWERT

NCA 2-669 **Stanford University** **1953**
PRECONDITIONED CONJUGATE GRADIENT TYPE ALGORITHMS FOR STRUCTURAL ANALYSIS APPL. ON MASSIVELY PARALLEL
Period *Obligations*
11/04/1991-10/31/1992 FY94: \$0 TOTAL: \$28,664
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G H GOLUB ARC/D H BAILEY 22-Computer Science

NCA 2-693 **Stanford University** **1954**
INVESTIGATION OF THE SCALES OF TURBULENCE IN HYPER SONIC RARIFIED FLOW
Period *Obligations*
03/10/1992-03/31/1994 FY94: \$0 TOTAL: \$71,295
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D BAGANOFF ARC/W J FEIEREISEN 41-Aero Engr
S LELE ARC/G S DEIWERT

NCA 2-700 **Stanford University** **1955**
PERFORMANCE STUDY ON THE INTEL IPSC/860 OF A PARTICLE SIMULATION FOR MODELING RAREFIED GAS FLOWS
Period *Obligations*
03/27/1992-03/31/1993 FY94: \$0 TOTAL: \$39,558
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D BAGANOFF ARC/W J FEIEREISEN 41-Aero Engr
ARC/G S DEIWERT

NCA 2-704 **Stanford University** **1956**
THE INFLUENCE OF REDUCED GRAVITY ON HUMAN LOAD CARRYING CAPABILITY AND PREFERRED LOAD PLACEMENT
Period *Obligations*
03/30/1992-03/31/1994 FY94: \$0 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B LUSIGNAN ARC/B WEBBON 46-Mech Engr
ARC/B LUNA

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NCA 2-706 **Stanford University** **1957**
DIODE LASER-BASED ABSORPTION DIAGNOSTICS FOR MEASUREMENTS OF O₂ IN SHOCK TUNNEL FLOWS
Period *Obligations*
04/15/1992-04/14/1993 FY94: \$0 TOTAL: \$36,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R K HANSON ARC/J A CAVOLOWSKY 46-Mech Engr
ARC/G S DEIWERT

NCA 2-723 **Stanford University** **1958**
ATOMIC RESONANCE RADIATION ENERGY INVESTIGATION AS A DIAGNOSTIC METHOD FOR NON-EQUILIBRIUM HYP
Period *Obligations*
06/29/1992-06/30/1994 FY94: \$0 TOTAL: \$71,294
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D BERSHADER ARC/S P SHARMA 41-Aero Engr
ARC/G S DEIWERT

NCA 2-748 **Stanford University** **1959**
LONG BONE STRUCTURAL PROPERTIES FROM BONE DENSITOMETRY
Period *Obligations*
08/25/1992-06/13/1993 FY94: \$0 TOTAL: \$5,005
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D CARTER ARC/R T WHALEN 46-Mech Engr

NCA 2-752 **Stanford University** **1960**
EXTENSION OF STATE-VECTOR SPLITTING TO THE NAVIER STOKES EQUATIONS
Period *Obligations*
09/25/1992-12/31/1993 FY94: \$5,822 TOTAL: \$34,890
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R W MACCORMACK ARC/T H PULLIAM 41-Aero Engr

NCA 2-754 **Stanford University** **1961**
MEAN VELOCITY AND TURBULENT STRESSES NEAR A THREE-DIMENSIONAL SEPARATION LINE.
Period *Obligations*
09/30/1992-09/30/1993 FY94: \$0 TOTAL: \$20,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J K EATON ARC/D A JOHNSON 46-Mech Engr

NCA 2-765 **Stanford University** **1962**
GRAPHICAL ANALYSIS OF UNSTEADY THREE-DIMENSIONAL SEPARATED FLOWS
Period *Obligations*
03/18/1993-12/31/1993 FY94: \$0 TOTAL: \$40,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
L HESSELINK ARC/L SCHIFF 41-Aero Engr

NCA 2-767 **Stanford University** **1963**
INTERNAL WELD DEFECTS: RESIDUAL STRESS FIELDS AND EFFECT ON FATIGUE LIFETIME
Period *Obligations*
11/16/1992-11/15/1994 FY94: \$0 TOTAL: \$80,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D NELSON ARC/H NELSON 46-Mech Engr

NCA 2-768 **Stanford University** **1964**
STANFORD-AMES GLOBAL CHANGE STUDIES: BIOGEOCHEMICAL CYCLES
Period *Obligations*
11/16/1992-11/30/1994 FY94: \$0 TOTAL: \$28,389
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
W G ERNST ARC/P B RUSSELL 39-Env Sci, NEC

NCA 2-781 **Stanford University** **1965**
TENSOR FIELD VISUALIZATION
Period *Obligations*
02/04/1993-01/31/1994 FY94: \$0 TOTAL: \$40,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
L HESSELINK ARC/A VAZIRI 41-Aero Engr

NCA 2-802 **Stanford University** **1966**
E235 SPACE SYSTEMS ENGINEERING 'THE ROAD TO MARS'
Period *Obligations*
04/02/1993-01/01/1994 FY94: \$0 TOTAL: \$12,574
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
B LUSIGNAN ARC/G BRIGGS 42-Astro Engr

NCA 2-805 **Stanford University** **1967**
SIMPLIFIED AERODYNAMIC AND STRUCTURAL MODELING FOR OBLIQUE ALL-WING AIRCRAFT
Period *Obligations*
04/02/1993-09/30/1993 FY94: \$0 TOTAL: \$20,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
I KROO ARC/J D PHILLIPS 41-Aero Engr

NCA 2-807 **Stanford University** **1968**
INVESTIGATIONS WITH SHEAR STRESS SENSITIVE LIQUID CRYSTALS
Period *Obligations*
04/02/1993-06/30/1995 FY94: \$28,500 TOTAL: \$36,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R J MOFFAT ARC/D C REDA 41-Aero Engr

NCA 2-810 **Stanford University** **1969**
SOLVING GAS-LIQUID REACTION-EQUILIBRIUM PROCESSES WHICH DETERMINE OZONE DESTRUCTION
Period *Obligations*
04/14/1993-08/31/1993 FY94: \$0 TOTAL: \$6,516
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J OLIGER ARC/R CHATFIELD 31-Atmos Sci

NCA 2-812 **Stanford University** **1970**
QUANTITATIVE STUDY OF ENERGY EXCHANGE RATE IN HYPERVELOCITY FLOWS OF SELECTED GASES
Period *Obligations*
04/30/1993-03/31/1995 FY94: \$37,866 TOTAL: \$77,475
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D BERSHADER ARC/S P SHARMA 41-Aero Engr
ARC/W J FEIEREISEN

NCA 2-828 **Stanford University** **1971**
DIODE LASER-BASED ABSORPTION DIAGNOSTICS FOR MEASUREMENT OF H₂O IN SHOCK TUNNEL FLOWS
Period *Obligations*
06/29/1993-06/30/1995 FY94: \$40,000 TOTAL: \$80,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R K HANSON ARC/J A CAVOLOWSKY 41-Aero Engr
ARC/G S DEIWERT

NCA 2-829 **Stanford University** **1972**
DIODE LASER-BASED O₂ ABSORPTION TECHNIQUE FOR MASS FLUX MEASUREMENT IN SCRAMJET ENGINES
Period *Obligations*
06/29/1993-06/30/1995 FY94: \$40,000 TOTAL: \$80,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R K HANSON ARC/J A CAVOLOWSKY 41-Aero Engr
ARC/G S DEIWERT

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NCA 2-830 **Stanford University** **1973**
AUTOMATIC ALGORITHM GENERATION FOR MAXWELL'S EQUATIONS
Period *Obligations*
06/29/1993-09/30/1994 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W MACCORMACK ARC/P GOORJIAN 41-Aero Engr

NCC 2-721 **Stanford University** **1981**
THE STRUCTURE, FACIES AND DEPOSITION OF SILICEOUS SINTER AROUND THERMAL SPRINGS: IMPLICATIONS FOR...
Period *Obligations*
07/03/1991-06/30/1994 FY94: \$0 TOTAL: \$156,066
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D R LOWE ARC/D J DES MARAIS 32-Geological Sci
ARC/S CHANG

NCC 2-55 **Stanford University** **1974**
RSCH AND TRNG ACTIVITIES FOR THE JOINT INSTITUTE FORAERONAUTICS AND ACOUSTICS
Period *Obligations*
12/01/1979-09/30/1994 FY94: \$516,626 TOTAL: \$6,278,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L ROBERTS ARC/C A SMITH 41-Aero Engr
ARC/J D MURPHY

NCC 2-749 **Stanford University** **1982**
KNOWLEDGE-ASSISTED SOFTWARE ENGINEERING (KASE) AND DEVELOPMENT OF A KASE ENVIRONMENT
Period *Obligations*
03/02/1992-09/30/1993 FY94: \$0 TOTAL: \$169,612
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E A FEIGENBAUM ARC/P E FRIEDLAND 22-Computer Science
R FIKES

NCC 2-307 **Stanford University** **1975**
CENTER OF EXCELLENCE IN MODEL-BASED HUMAN PERFORMANCE
Period *Obligations*
07/01/1984-11/30/1994 FY94: \$168,355 TOTAL: \$2,261,932
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B A WANDELL ARC/A J AHUMADA 69-Psych, NEC
ARC/A B WATSON

NCC 2-777 **Stanford University** **1983**
COLOR IMAGE PROCESSING FOR FLAT PANEL VISUAL DISPLAY MODELING
Period *Obligations*
12/16/1992-10/31/1994 FY94: \$166,212 TOTAL: \$326,212
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A M PETERSON ARC/J O LARIMER 29-Math/Computer, NEC
ARC/B R SMITH

NCC 2-333 **Stanford University** **1976**
RESEARCH ON CONTROL OF SPACECRAFT MANIPULATOR SYSTEMS
Period *Obligations*
11/01/1987-10/31/1994 FY94: \$700,000 TOTAL: \$5,259,799
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H CANNON ARC/B P HINE 42-Astro Engr
ARC/H LUM

NCC 2-778 **Stanford University** **1984**
ADAPTATION AND PLASTICITY IN BIOLOGICAL SYSTEMS
Period *Obligations*
12/16/1992-08/31/1995 FY94: \$62,000 TOTAL: \$167,104
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M W FELDMAN ARC/M D ROSS 51-Biological Sci

NCC 2-460 **Stanford University** **1977**
CENTER FOR TURBULENCE RESEARCH
Period *Obligations*
12/01/1986-09/30/1994 FY94: \$1,418,690 TOTAL: \$9,761,323
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P MOIN ARC/M INOUE 46-Mech Engr
W C REYNOLDS ARC/H LOMAX

NCC 2-844 **Stanford University** **1985**
OBJECT-BASED TASK-LEVEL CONTROL FOR SEMI-AUTONOMOUS HELICOPTER USING GPS
Period *Obligations*
02/04/1994-12/31/1994 FY94: \$120,000 TOTAL: \$120,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M ROCK ARC/B SRIDHAR 41-Aero Engr
ARC/P SMITH

NCC 2-514 **Stanford University** **1978**
CONSERVATION OF DESIGN KNOWLEDGE
Period *Obligations*
12/01/1987-09/30/1994 FY94: \$149,788 TOTAL: \$1,226,814
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L LEIFER ARC/P E FRIEDLAND 22-Computer Science
ARC/W BROOKS

NCC 2-5001 **Stanford University** **1986**
MEAN VELOCITY AND TURBULENT STRESS NEAR THE WALL IN A THREE-DIMENSIONAL BOUNDARY LAYER
Period *Obligations*
09/28/1993-09/30/1994 FY94: \$0 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J EATON ARC/D A JOHNSON 41-Aero Engr

NCC 2-537 **Stanford University** **1979**
DEVELOPMENT OF A REUSABLE KNOWLEDGE BASE FOR SPACE APPLICATIONS
Period *Obligations*
02/01/1988-10/31/1994 FY94: \$213,516 TOTAL: \$2,090,278
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E FIKES ARC/P E FRIEDLAND 22-Computer Science
E A FEIGENBAUM MSFC/M FREEMAN

NCC 2-5002 **Stanford University** **1987**
FOUNDATION OF THE BLADE-VORTEX NOISE GENERATION PHENOMENON: EXPERIMENT AND COMPUTATION
Period *Obligations*
09/28/1993-09/30/1994 FY94: \$0 TOTAL: \$25,079
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D BERSHADER ARC/C TUNG 41-Aero Engr

NCC 2-683 **Stanford University** **1980**
NONLINEAR AERODYNAMICS AND THE DESIGN OF WING TIPS
Period *Obligations*
07/09/1990-03/31/1993 FY94: \$0 TOTAL: \$184,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I M KROO ARC/M D MADSON 41-Aero Engr
S C SMITH ARC/L L ERICKSON

NCC 2-5020 **Stanford University** **1988**
CONTROLLER DESIGN FOR HELICOPTERS WITH VARIABLE ROTOR SPEED CONTROL
Period *Obligations*
12/21/1993-11/30/1994 FY94: \$32,375 TOTAL: \$32,375
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S ROCK ARC/R CHEN 41-Aero Engr
ARC/J SCHROEDER

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCC 2-5023 **Stanford University** **1989**
MODELING THE CHEMISTRY AND PHYSICS OF SULFATE CLOUD
CONDENSATION NUCLEI FORMATION IN REMOTE MARINE
Period *Obligations*
12/21/1993-12/31/1994 FY94: \$21,000 TOTAL: \$21,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L HILDEMAN ARC/R CHATFIELD 31-Atmos Sci

NCC 2-5066 **Stanford University** **1997**
MECHANISMS OF CELL CYCLE CELL DEATH AND GROWTH FACTOR
RESPONSE IN MICROGRAVITY
Period *Obligations*
06/03/1994-05/31/1995 FY94: \$2,400 TOTAL: \$2,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R SCHIMKE ARC/R GRAYMES 51-Biological Sci

NCC 2-5025 **Stanford University** **1990**
SIMPLIFIED AERODYNAMIC AND STRUCTURAL MODELING FOR
OBLIQUE ALL WING AIRCRAFT PHASE II
Period *Obligations*
01/14/1994-06/30/1994 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
ARC/J D PHILIPS 41-Aero Engr

NCC 2-5070 **Stanford University** **1998**
COMPUTATION OF LIFTING WING-FLAP CONFIGURATIONS
Period *Obligations*
06/30/1994-06/30/1995 FY94: \$39,741 TOTAL: \$39,741
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J CANTWELL ARC/D KWAK 41-Aero Engr
ARC/S E ROGERS

NCC 2-5030 **Stanford University** **1991**
CMEX STANFORD SITE SELECTION PROJECT
Period *Obligations*
02/03/1994-01/31/1995 FY94: \$39,866 TOTAL: \$39,866
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B LUSIGNAN ARC/G BRIGGS 42-Astro Engr

NCC 2-5071 **Stanford University** **1999**
DEVELOPMENT OF A DETONATION DRIVER FOR THE NASA-AMES
HYPERSONIC SHOCK TUNNEL FACILITY
Period *Obligations*
07/15/1994-06/30/1995 FY94: \$12,912 TOTAL: \$12,912
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J CANTWELL ARC/G S DEIWERT 41-Aero Engr

NCC 2-5033 **Stanford University** **1992**
BOUNDARY LAYER MODIFICATION WITH ULTRASONIC AIR TRANSDUCERS
Period *Obligations*
02/03/1994-01/31/1995 FY94: \$35,046 TOTAL: \$35,046
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B K YAKUB ARC/K SHARIFF 41-Aero Engr

NCC 2-5072 **Stanford University** **2000**
PARTICLE/CONTINUUM HYBRID SIMULATION IN A PARALLEL
COMPUTING ENVIRONMENT
Period *Obligations*
07/28/1994-07/31/1995 FY94: \$38,400 TOTAL: \$38,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D BAGANOFF ARC/W J FEIEREISEN 41-Aero Engr

NCC 2-5034 **Stanford University** **1993**
DEVELOP, IMPLEMENT AND EVALUATE METHODS IN DETERMINING
SUPERSONIC COMBUSTOR EFFICIENCIES
Period *Obligations*
02/03/1994-06/30/1994 FY94: \$12,328 TOTAL: \$12,328
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J CANTWELL ARC/G S DEIWERT 41-Aero Engr

NCC 2-5080 **Stanford University** **2001**
SMALL LOW COST SATELLITE BUS FOR DASI
Period *Obligations*
07/15/1994-01/15/1995 FY94: \$18,220 TOTAL: \$18,220
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G SPRINGER ARC/R ARNO 42-Astro Engr

NCC 2-5058 **Stanford University** **1994**
SINGLE-WINGED AUTOROTATING AERODYNAMIC BRAKE FOR MARTIAN
ATMOSPHERIC ENTRY
Period *Obligations*
05/19/1994-11/30/1994 FY94: \$39,570 TOTAL: \$39,570
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I KROO ARC/L LEMKE 42-Astro Engr

NCC 2-5088 **Stanford University** **2002**
SERIAL SCANNING AND REGISTRATION OF HIGH RESOLUTION
QUANTITATIVE COMPUTED TOMOGRAPHY VOLUME SCANS ...
Period *Obligations*
07/28/1994-07/31/1996 FY94: \$24,467 TOTAL: \$24,467
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S A NAPEL ARC/R WHALEN 56-Medical Sciences

NCC 2-5059 **Stanford University** **1995**
IMPACTS OF AUTOMATED DIFFERENTIATION ON NUMERICAL
DESIGN OPTIMIZATION OF COMPLEX ENGINEERING SYSTEMS
Period *Obligations*
05/19/1994-05/31/1996 FY94: \$26,000 TOTAL: \$26,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I KROO ARC/H MIRUA 41-Aero Engr

NCC 2-5089 **Stanford University** **2003**
EXPERIMENTS ON 'ON DEMAND' VORTEX GENERATORS
Period *Obligations*
07/28/1994-10/15/1994 FY94: \$24,719 TOTAL: \$24,719
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P BRADSHAW ARC/N N MANSOUR 41-Aero Engr

NCC 2-5065 **Stanford University** **1996**
STUDY OF HIGH ENTHALPY FLOWS BY ATOMIC RESONANCE SPECTROSCOPY
Period *Obligations*
06/08/1994-06/30/1995 FY94: \$35,376 TOTAL: \$35,376
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D BERSHADER ARC/S SHARMA 41-Aero Engr

NCC 2-5095 **Stanford University** **2004**
AUTOMATED FLOW FEATURE RECOGNITION FOR COMPUTATIONAL
STEERING
Period *Obligations*
08/18/1994-08/31/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L HESSELINK ARC/W R VAN DALSEM 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCC 2-5100 Stanford University 2005
 TOOLS FOR WAVELET AND GENERALIZED SAVELET ANALYSIS OF
 TIME SERIES AND SINGAL DATA
Period Obligations
 08/31/1994-08/31/1995 FY94: \$13,000 TOTAL: \$13,000
Prin. Invest. NASA Tech. Officer CASE Category
 D L DONOHO ARC/J D SARGLE 29-Math/Cmputer,NEC

NGT 00-010-018 Stanford University 2006
 NGT-10018/STANFORD UNIV/MULTIDCIPLINARY DESIGN AND A
 NALYSIS FELLOWSHIP PROGRAM
Period Obligations
 12/01/1993-03/31/1994 FY94: \$45,979 TOTAL: \$45,979
Prin. Invest. NASA Tech. Officer CASE Category
 I KROO HQ/G S SEIDEL 41-Aero Engr
 HQ/J R FACEY

NGT 00-030-014 Stanford University 2007
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 11/05/1990-12/31/1992 FY94: TOTAL: \$42,500
Prin. Invest. NASA Tech. Officer CASE Category
 J K HOLEN HQ/G ASRAR 33-Oceanography

NGT 00-030-051 Stanford University 2008
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 09/09/1991-08/31/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 A R TOWNSEND HQ/D M BUTLER 39-Env Sci, NEC
 P VITOUSEK HQ/G S WILSON

NGT 00-030-078 Stanford University 2009
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 09/09/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 M G BAC HQ/D M BUTLER 39-Env Sci, NEC
 S BRASSELL HQ/G S WILSON

NGT 00-030-115 Stanford University 2010
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 G K YEH HQ/G ASRAR 22-Computer Science
 HQ/D M BUTLER

NGT 00-030-155 Stanford University 2011
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 10/27/1992-08/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 R FREIFELDER HQ/G ASRAR 33-Oceanography
 HQ/D M BUTLER

NGT 00-030-156 Stanford University 2012
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 11/27/1992-08/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 V S INAN HQ/G ASRAR 39-Env Sci, NEC
 HQ/J S THEON

NGT 00-050-445 Stanford University 2013
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/02/1989-06/30/1993 FY94: \$0 TOTAL: \$84,000
Prin. Invest. NASA Tech. Officer CASE Category
 P BRADSHAW HQ/F C OWENS 46-Mech Engr

NGT 00-050-564 Stanford University 2014
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/02/1990-06/30/1993 FY94: TOTAL: \$65,949
Prin. Invest. NASA Tech. Officer CASE Category
 D R CARTER HQ/F C OWENS 46-Mech Engr

NGT 00-050-642 Stanford University 2015
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/24/1990-09/29/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 B WIDROW HQ/F C OWENS 45-Elec Engr

NGT 00-050-680 Stanford University 2016
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 10/12/1990-09/30/1994 FY94: \$0 TOTAL: \$88,000
Prin. Invest. NASA Tech. Officer CASE Category
 U INAN LERC/F MONTEGANI 45-Elec Engr

NGT 00-050-747 Stanford University 2017
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/17/1991-08/14/1993 FY94: \$0 TOTAL: \$39,860
Prin. Invest. NASA Tech. Officer CASE Category
 G M HOMSY ARC/M MOORE 41-Aero Engr

NGT 00-050-774 Stanford University 2018
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/16/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 A B WALKER HQ/F C OWENS 13-Physics

NGT 00-050-790 Stanford University 2019
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/10/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 U S INAN HQ/F C OWENS 45-Elec Engr

NGT 00-050-856 Stanford University 2020
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/19/1991-09/14/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 J A LIPA HQ/J K ALEXANDER 13-Physics

NGT 00-050-895 Stanford University 2021
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/15/1992-07/09/1994 FY94: \$0 TOTAL: \$27,500
Prin. Invest. NASA Tech. Officer CASE Category
 P VITOUSEK ARC/M MOORE 51-Biological Sci

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NGT 00-050-938 **Stanford University** **2022**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/24/1992-06/30/1994 FY94: \$0 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
V PETROSIAN HQ/J ALEXANDER 13-Physics

NGT 00-050-964 **Stanford University** **2023**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/16/1992-07/31/1994 FY94: \$0 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M J FLYNN HQ/P HUNTER 22-Computer Science

NGT 00-051-028 **Stanford University** **2024**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/22/1993-06/30/1996 FY94: \$7,000 TOTAL: \$29,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R J MOFFAT ARC/M MOORE 46-Mech Engr

NGT 00-051-056 **Stanford University** **2025**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/25/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R H CANNON JSC/S GOLDSTEIN 41-Aero Engr

NGT 00-051-153 **Stanford University** **2026**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/25/1993-08/14/1996 FY94: \$44,000 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J LIPA HQ/D A HOLLAND 13-Physics

NGT 00-051-238 **Stanford University** **2027**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/08/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M CAPPELI LERC/F MONTEGANI 46-Mech Engr

NGT 00-051-285 **Stanford University** **2028**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/06/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J OLIGER HQ/D HOLLAND 32-Geological Sci

NGT 00-051-308 **Stanford University** **2029**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/23/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
B CANTWELL ARC/M MOORE 41-Aero Engr

NGT 00-051-344 **Stanford University** **2030**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
G M HOMSY HQ/G A LESANE 43-Chem Engr

NGT 00-070-116 **Stanford University** **2031**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
03/17/1989-09/30/1994 FY94: \$0 TOTAL: \$95,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
P M BANKS HQ/F C OWENS 41-Aero Engr

NGT 00-070-178 **Stanford University** **2032**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
07/09/1990-06/30/1994 FY94: \$0 TOTAL: \$88,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
V PETROSIAN HQ/F C OWENS 13-Physics

NGT 00-070-182 **Stanford University** **2033**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/29/1990-05/31/1993 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A WALKER HQ/F C OWENS 13-Physics

NGT 00-070-188 **Stanford University** **2034**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/08/1990-07/31/1993 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J F VESECKY HQ/F C OWENS 45-Elec Engr

NGT 00-070-194 **Stanford University** **2035**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
09/17/1990-09/14/1993 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R V WAGONER HQ/F C OWENS 13-Physics

NGT 00-070-249 **Stanford University** **2036**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/18/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
G TYLER HQ/P HUNTER 45-Elec Engr

NGT 00-070-275 **Stanford University** **2037**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/29/1992-06/30/1993 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
L LEIFER ARC/M MOORE 46-Mech Engr

NGT 00-070-277 **Stanford University** **2038**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/26/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
B CANTWELL ARC/M MOORE 41-Aero Engr

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NAG 2-711 University of California - Berkeley 2055
 ANTENNA COUPLED MICROBOLOMETER
Period Obligations
 07/16/1991-02/28/1995 FY94: \$45,000 TOTAL: \$178,000
Prin. Invest. NASA Tech. Officer CASE Category
 P L RICHARDS ARC/C R MCCREIGHT 13-Physics
 ARC/R E MCMURRAY

NAG 5-1230 University of California - Berkeley 2063
 STUDIES OF THE HIGH-LATITUDE INTERSTELLA MEDIUM
Period Obligations
 08/04/1989-10/31/1994 FY94: \$0 TOTAL: \$195,090
Prin. Invest. NASA Tech. Officer CASE Category
 C HEILES GSFC/D WEST 11-Astronomy

NAG 2-858 University of California - Berkeley 2056
 A SEARCH FOR PURE CARBON CLUSTERS IN THE ISM
Period Obligations
 08/17/1993-11/30/1994 FY94: \$0 TOTAL: \$23,500
Prin. Invest. NASA Tech. Officer CASE Category
 R J SAYKALLY ARC/C D LAUGHLIN 11-Astronomy
 ARC/C M GILLESPIE

NAG 5-1318 University of California - Berkeley 2064
 RESERACH USING THE COBE SATELLITE
Period Obligations
 12/14/1989-12/31/1994 FY94: \$225,000 TOTAL: \$1,799,400
Prin. Invest. NASA Tech. Officer CASE Category
 G F SMOOT GSFC/J MATHER 11-Astronomy

NAG 2-917 University of California - Berkeley 2057
 FIFTH INTERNATIONAL CONFERENCE ON HYDROGEN EFFECTS ON MATERIAL BEHAVIOR
Period Obligations
 07/15/1994-09/30/1994 FY94: \$7,000 TOTAL: \$7,000
Prin. Invest. NASA Tech. Officer CASE Category
 R O RITCHIE ARC/T L PANONTIN 47-Materials Engr

NAG 5-1360 University of California - Berkeley 2065
 A STUDY OF THE UNIFORMITY OF THE CATALOG OF GALAXI ES EXTRACTED FROM THE IRAS DAT
Period Obligations
 04/12/1990-05/31/1995 FY94: \$50,000 TOTAL: \$240,000
Prin. Invest. NASA Tech. Officer CASE Category
 J SILK GSFC/D WEST 11-Astronomy

NAG 3-1143 University of California - Berkeley 2058
 FLUID INTERFACE BEHAVIOR UNDER LOW-AND ZERO-GRAVIT Y CONDITIONS
Period Obligations
 03/29/1990-09/30/1994 FY94: \$0 TOTAL: \$270,000
Prin. Invest. NASA Tech. Officer CASE Category
 P CONCUS LERC/M M WEISLOGEL 21-Mathematics

NAG 5-1507 University of California - Berkeley 2066
 MODELING OF DYNAMICS EXPLORER UV IMAGES
Period Obligations
 03/27/1991-04/14/1993 FY94: \$0 TOTAL: \$123,000
Prin. Invest. NASA Tech. Officer CASE Category
 J CHAKRABARTI GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 3-1252 University of California - Berkeley 2059
 A FUNDAMENTAL STUDY OF SMOLDERING COMBUSTION IN MIC ROGRAVITY
Period Obligations
 03/15/1991-03/13/1997 FY94: \$160,057 TOTAL: \$638,879
Prin. Invest. NASA Tech. Officer CASE Category
 A C LERC/S OLSON 49-Engr, NEC
 FERNANDEZ-PELLO
 P J PAGNI

NAG 5-1523 University of California - Berkeley 2067
 ISEE/AMPT E STUDIES OF THE RELATIONSHIP OF FLUX TRA NSFER EVENTS AND SURFACE WAVES AND OF SUBSTORM...
Period Obligations
 04/03/1991-04/14/1994 FY94: \$0 TOTAL: \$108,300
Prin. Invest. NASA Tech. Officer CASE Category
 C A CATTELL GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 3-1633 University of California - Berkeley 2060
 MARANGONI EFFECTS IN BOILING OF BINARY FLUID MIXTU RES UNDER MICROGRAVITY
Period Obligations
 06/24/1994-06/23/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 V P CAREY LERC/B S SINGH 46-Mech Engr

NAG 5-1559 University of California - Berkeley 2068
 STEREOSCOPIC OBSERVATIONS OF SOLAR FLARE X-RAY AND GAMMA-RAY SOURCES
Period Obligations
 04/17/1991-12/14/1994 FY94: \$37,200 TOTAL: \$109,700
Prin. Invest. NASA Tech. Officer CASE Category
 K C HURLEY GSFC/J P NORRIS 11-Astronomy
 GSFC/D A KNIFFEN

NAG 5-696 University of California - Berkeley 2061
 A PROPOSAL TO FLY THE EUV/FUV SPECTROMETER ON ORFEUS FOR ASTRO-SPAS I AND II
Period Obligations
 12/18/1992-10/31/1994 FY94: \$560,000 TOTAL: \$985,000
Prin. Invest. NASA Tech. Officer CASE Category
 C S BOWYER GSFC/L J EARLY 13-Physics
 GSFC/R H PLESS

NAG 5-1560 University of California - Berkeley 2069
 MAINTAINING THE THIRD INTERPLANETARY NETWORK FOR G AMMA-RAY BURSTERS
Period Obligations
 04/17/1991-09/30/1994 FY94: \$79,000 TOTAL: \$198,800
Prin. Invest. NASA Tech. Officer CASE Category
 K C HURLEV GSFC/J P NORRIS 11-Astronomy
 GSFC/D A KNIFFEN

NAG 5-959 University of California - Berkeley 2062
 ELECTRON REFLECTOMETER ADDITION TO THE MAGNETIC FIELDS INVESTIGATION ON THE MARS OBSERVER MISSION
Period Obligations
 08/01/1987-03/31/1994 FY94: \$0 TOTAL: \$1,050,000
Prin. Invest. NASA Tech. Officer CASE Category
 R P LIN GSFC/M H ACUNA 13-Physics
 C F MCKEE

NAG 5-1607 University of California - Berkeley 2070
 SCIENCE VERIFICATION AND GUARANTEED-TIME OBSERVATI ONS WITH THE HST
Period Obligations
 05/21/1991-10/31/1994 FY94: \$284,128 TOTAL: \$992,320
Prin. Invest. NASA Tech. Officer CASE Category
 I KING GSFC/S SOBIESKI 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 5-1640 University of California - Berkeley 2071
SUPPORTING STUDIES FOR THE TRANSIENT GAMMA-RAY SPECTROMETER (TRRS) ABOARD WIND
Period *Obligations*
06/28/1991-06/30/1994 FY94: \$0 TOTAL: \$11,522
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K C HURLEY GSFC/B TEEGARDEN 11-Astronomy

NAG 5-1727 University of California - Berkeley 2072
DETECTION OF GAMMA RAY BURSTS AND OPTICAL TRANSIENT COUNTERPARTS AND NEUTRON STARS
Period *Obligations*
10/15/1991-01/31/1996 FY94: \$36,000 TOTAL: \$54,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K C HURLEY GSFC/R PETRE 11-Astronomy

NAG 5-1818 University of California - Berkeley 2073
IS THE X-RAY CONTINUUM FROM RADIO-LOUD QUASARS
Period *Obligations*
10/15/1991-10/14/1995 FY94: \$55,000 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H SPINRAD GSFC/R PETRE 11-Astronomy

NAG 5-1851 University of California - Berkeley 2074
DETECTION OF A QUIESCENT X-RAY COUNTERPART OF TWO NEWLY DISCOVERED GAMMA RAY BURSTS
Period *Obligations*
12/18/1991-05/31/1993 FY94: TOTAL: \$4,895
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K C HURLEY GSFC/R PETRE 11-Astronomy

NAG 5-1892 University of California - Berkeley 2075
SOFT X-RAY SPECTROSCOPY OF INTERMEDIATE POLARS (UC BSSL 1689/92)
Period *Obligations*
02/10/1992-02/14/1994 FY94: \$0 TOTAL: \$29,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S KAHN GSFC/R PETRE 11-Astronomy

NAG 5-1988 University of California - Berkeley 2076
GLOBAL ANALYSIS OF THE VOYAGER UVS FAR UV AND EUV SPECTRAL CATALOGUE
Period *Obligations*
06/05/1992-06/14/1994 FY94: \$0 TOTAL: \$73,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
CARONE GSFC/D WEST 11-Astronomy

NAG 5-2009 University of California - Berkeley 2077
A SUPERNOVA ALERT IN NEARBY IRAS GALAXIES FOR THE GAMMA RAY OBSERVATORY
Period *Obligations*
07/15/1992-10/14/1995 FY94: \$0 TOTAL: \$70,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R D TRIPP GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2015 University of California - Berkeley 2078
AN IRAS-BASED SEARCH FOR DUSTY LATE WC-TYPE WOLF-R AYET STARS
Period *Obligations*
07/15/1992-04/14/1994 FY94: \$0 TOTAL: \$47,100
Prin. Invest. *NASA Tech. Officer* *CASE Category*
COHEN GSFC/D WEST 11-Astronomy

NAG 5-2020 University of California - Berkeley 2079
THEORETICAL STUDIES OF GAMMA RAY BURSTERS AND THE DIFFUSE GAMMA RAY BACKGROUND
Period *Obligations*
07/17/1992-07/31/1993 FY94: TOTAL: \$71,951
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J I SILK GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2067 University of California - Berkeley 2080
X-RAY OBSERVATIONS OF SELECTED LINERS
Period *Obligations*
08/05/1992-08/31/1993 FY94: \$0 TOTAL: \$7,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A V FILIPPENKO GSFC/R PETRE 11-Astronomy

NAG 5-2088 University of California - Berkeley 2081
SUPERNOVA REMNANT BLAST-WAVE INTERACTIONS WITH INTERSTELLAR CLOUDS: CAST STUDIES FROM CYGNUS LOOP
Period *Obligations*
09/02/1992-03/14/1995 FY94: \$20,000 TOTAL: \$59,629
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R GRAHAM GSFC/R PETRE 11-Astronomy

NAG 5-2135 University of California - Berkeley 2082
HEAVY ELEMENTS ABUNDANCES IN HOT DA WHITE DWARFS: C, N, SI, AND FE
Period *Obligations*
11/09/1992-01/31/1995 FY94: \$13,560 TOTAL: \$19,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S BOWYER GSFC/D WEST 11-Astronomy

NAG 5-2182 University of California - Berkeley 2083
A DEEP SEARCH FOR X-RAY EMISSION FROM SATURN
Period *Obligations*
01/26/1993-04/30/1994 FY94: TOTAL: \$8,779
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H SPINRAD HQ/R PETRE 11-Astronomy

NAG 5-2195 University of California - Berkeley 2084
THE X-RAY PROPERTIES OF GROUPS OF GALAXIES
Period *Obligations*
03/01/1993-02/28/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M DAVIS GSFC/R PETRE 11-Astronomy

NAG 5-2304 University of California - Berkeley 2085
HIGH SPATIAL RESOLUTION INVESTIGATIONS OF MICROCHANNEL PLATE IMAGERY PROPERTIES OF UV DETECTOR
Period *Obligations*
07/07/1993-07/14/1995 FY94: \$337,056 TOTAL: \$530,056
Prin. Invest. *NASA Tech. Officer* *CASE Category*
O H SIEGMUND GSFC/G SONNEBORN 11-Astronomy

NAG 5-2351 University of California - Berkeley 2086
ELECTRON ACCELERATION IN SOLAR FLARES
Period *Obligations*
08/12/1993-07/30/1994 FY94: \$16,500 TOTAL: \$33,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R P LIN GSFC/J NORRIS 11-Astronomy
GSFC/N WHITE

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 5-2378 University of California - Berkeley 2087
EUV SPECTROSCOPY OF THE ACCRETION REGION IN MAGNETIC CATAclysmic BINARIES
Period Obligations
09/22/1993-09/30/1995 FY94: \$21,596 TOTAL: \$21,596
Prin. Invest. NASA Tech. Officer CASE Category
S M KAHN GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2395 University of California - Berkeley 2088
A STUDY OF LONG-TERM VARIABILITY IN THE X-RAY EMISSION PROPERTIES OF AM HERCULIS
Period Obligations
10/13/1993-10/14/1995 FY94: \$38,800 TOTAL: \$38,800
Prin. Invest. NASA Tech. Officer CASE Category
S M KAHN GSFC/D WEST 11-Astronomy

NAG 5-2405 University of California - Berkeley 2089
HEAVY ELEMENTS IN HOT DA WHITE DWARFS: A GROUP OF EXCEPTIONAL EUV-SELECTED OBJECTS
Period Obligations
10/22/1993-10/31/1994 FY94: \$129,386 TOTAL: \$129,386
Prin. Invest. NASA Tech. Officer CASE Category
C S BOWYER GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2430 University of California - Berkeley 2090
A SEARCH FOR PULSED RADIO EMISSION FROM UNIDENTIFIED EGRET SOURCES
Period Obligations
11/12/1993-11/30/1994 FY94: \$38,000 TOTAL: \$38,000
Prin. Invest. NASA Tech. Officer CASE Category
D C BACKER GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2438 University of California - Berkeley 2091
ANALYSIS OF COBE DMR SKY MAPS
Period Obligations
11/10/1993-11/14/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
J SILK GSFC/D WEST 11-Astronomy

NAG 5-2452 University of California - Berkeley 2092
COUPLED DIFFUSION AND CONDENSATION PROBLEMS: IMPLICATIONS FOR WATER VAPOR AND SULFURIC ACID
Period Obligations
12/13/1993-03/14/1994 FY94: \$15,863 TOTAL: \$15,863
Prin. Invest. NASA Tech. Officer CASE Category
S BOWYER GSFC/M MUMMA 11-Astronomy

NAG 5-2516 University of California - Berkeley 2093
VARIABILITY IN GASEOUS SHELLS AROUND A STARS
Period Obligations
02/16/1994-02/28/1995 FY94: \$2,500 TOTAL: \$2,500
Prin. Invest. NASA Tech. Officer CASE Category
O SIEGMUND GSFC/D WEST 11-Astronomy

NAG 5-2555 University of California - Berkeley 2094
STUDIES OF EUV INSTRUMENTATION AND TECHNOLOGIES
Period Obligations
03/14/1994-03/31/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
R F MALINA GSFC/G SONNEBORN 11-Astronomy

NAG 5-2575 University of California - Berkeley 2095
EUV OBSERVATIONS OF GAMMA-RAY BURSTERS
Period Obligations
04/12/1994-04/14/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
K C HURLEY GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2586 University of California - Berkeley 2096
FE L-SHELL LINE EMISSION FROM SEYFERT GALAXIES
Period Obligations
05/05/1994-11/14/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
S KHAN GSFC/N WHITE 11-Astronomy

NAG 5-2619 University of California - Berkeley 2097
X-RAY SPECTRA OF RADIO QUASARS AND RELATIVISTIC BEAMING
Period Obligations
06/14/1994-06/14/1995 FY94: \$41,000 TOTAL: \$41,000
Prin. Invest. NASA Tech. Officer CASE Category
H SPINRAD GSFC/D WEST 11-Astronomy

NAG 5-2620 University of California - Berkeley 2098
LOW METALLICITY IN VERY HOT WHITE DWARFS: IMPLICATION ON MASS LOSS PROCESSES IN YOUNG D
Period Obligations
06/15/1994-06/14/1995 FY94: \$38,964 TOTAL: \$38,964
Prin. Invest. NASA Tech. Officer CASE Category
J DUPUIS GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2623 University of California - Berkeley 2099
EUV STUDIES OF X-RAY ILLUMINATED DISKS IN INTERMEDIATE POLARS 2
Period Obligations
06/28/1994-06/30/1995 FY94: \$16,661 TOTAL: \$16,661
Prin. Invest. NASA Tech. Officer CASE Category
M HURWITZ GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2624 University of California - Berkeley 2100
COORDINATED HST - EUVE OBSERVATIONS OF YZ CM1
Period Obligations
06/28/1994-06/30/1995 FY94: \$4,986 TOTAL: \$4,986
Prin. Invest. NASA Tech. Officer CASE Category
M MATHIODAKIS GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2625 University of California - Berkeley 2101
INVESTIGATION OF THE EFFECT OF THE BREAK-UP OF COMET SHOEMAKER-LEVY 9 ON THE IO PLASMA
Period Obligations
06/28/1994-06/30/1995 FY94: \$13,917 TOTAL: \$13,917
Prin. Invest. NASA Tech. Officer CASE Category
R LIEU GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2635 University of California - Berkeley 2102
TECHNOLOGY DEVELOPMENT FOR HIGH RESOLUTION GAMMA RAY SPECTROSCOPY
Period Obligations
06/28/1994-06/30/1995 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
R P LIN GSFC/B J TEEGARDEN 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 5-2636 University of California - Berkeley 2103
A TEST FOR THE HOMOGENEITY OF THE HELIUM IONIZATION FRACTION IN THE LOCAL ISM
Period Obligations
07/05/1994-07/14/1995 FY94: \$55,199 TOTAL: \$55,199
Prin. Invest. NASA Tech. Officer CASE Category
S YENNEZ GSFC/R OLIVERSEN 12-Chemistry

NAG 5-2641 University of California - Berkeley 2104
EUV SPECTROSCOPY OF ANOMALOUS AMHERST STARS AND FLARES AND INTRASYSTEM GAS IN V4741 TAURII
Period Obligations
07/06/1994-07/14/1995 FY94: \$62,900 TOTAL: \$62,900
Prin. Invest. NASA Tech. Officer CASE Category
O H SIEGMUND GSFC/R J OLIVERSEN 11-Astronomy

NAG 5-2683 University of California - Berkeley 2105
THE CORONAE OF M DWARFS, THE FIP EFFECT AND THE ORIGIN OF COSMIC RAYS
Period Obligations
08/11/1994-08/14/1995 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest. NASA Tech. Officer CASE Category
J J DRAKE GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2718 University of California - Berkeley 2106
CONTINUED ANALYSIS OF GEOTAIL ELECTRIC FIELD DATA
Period Obligations
09/07/1994-09/30/1995 FY94: \$6,294 TOTAL: \$6,294
Prin. Invest. NASA Tech. Officer CASE Category
F S MOZER GSFC/D FAIRFIELD 11-Astronomy

NAG 6-10 University of California - Berkeley 2107
SOUNDING ROCKET RESEARCH PROGRAM
Period Obligations
11/01/1980-10/31/1994 FY94: \$310,000 TOTAL: \$3,102,949
Prin. Invest. NASA Tech. Officer CASE Category
C W CARLSON GSFC/L J EARLY 19-Phys Sci, NEC
F S MOZER GSFC/R H PLESS
K A ANDERSON

NAG 8-830 University of California - Berkeley 2108
FGAMMA RAY AND HARD X-RAY
Period Obligations
04/17/1990-09/30/1994 FY94: \$0 TOTAL: \$4,690,000
Prin. Invest. NASA Tech. Officer CASE Category
R P LIN MSFC/J M DAVIS 39-Env Sci, NEC

NAGW 604 University of California - Berkeley 2109
EXPERIMENTAL STUDIES PERTAINING TO THE NATURE OF THE EARTH'S CORE
Period Obligations
04/15/1984-09/30/1994 FY94: \$89,900 TOTAL: \$789,999
Prin. Invest. NASA Tech. Officer CASE Category
R JEANLOZ HQ/J UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 1290 University of California - Berkeley 2110
STUDY OF PHOTOEMISSION CHARACTERISTICS OF INORGANIC PHOTOCATH.
Period Obligations
05/01/1988-04/30/1995 FY94: \$190,000 TOTAL: \$1,414,348
Prin. Invest. NASA Tech. Officer CASE Category
O H SIEGMUND HQ/G C CLAYTON 11-Astronomy

NAGW 1352 University of California - Berkeley 2111
ROCKET BORNE SUBMILLIMETER WAVE ASTRONOMY
Period Obligations
07/13/1988-11/30/1994 FY94: \$0 TOTAL: \$601,600
Prin. Invest. NASA Tech. Officer CASE Category
P L RICHARDS HQ/F C GILLET 11-Astronomy

NAGW 1503 University of California - Berkeley 2112
THE SYSTEMATIC INTERPRETATION OF COSMIC RAY DATA
Period Obligations
12/28/1988-11/30/1994 FY94: \$126,000 TOTAL: \$804,000
Prin. Invest. NASA Tech. Officer CASE Category
H J CRAWFORD HQ/W V JONES 13-Physics
HQ/J D BOHLIN

NAGW 1597 University of California - Berkeley 2113
SPACE-BORNE INFRARED ASTRONOMY
Period Obligations
12/27/1988-11/30/1994 FY94: \$180,000 TOTAL: \$1,025,000
Prin. Invest. NASA Tech. Officer CASE Category
A E LANGE HQ/F C GILLET 11-Astronomy

NAGW 1626 University of California - Berkeley 2114
NONLINEAR ELECTROSTATIC EFFECTS ON AURORAL FIELD LINES
Period Obligations
03/01/1989-03/31/1993 FY94: \$0 TOTAL: \$252,000
Prin. Invest. NASA Tech. Officer CASE Category
F S MOZER HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1795 University of California - Berkeley 2115
DEVELOPMENT OF SPACE PLASMA MEASUREMENT TECHNIQUES
Period Obligations
06/26/1989-07/31/1995 FY94: \$0 TOTAL: \$307,500
Prin. Invest. NASA Tech. Officer CASE Category
K A ANDERSON HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1860 University of California - Berkeley 2116
THEORETICAL STUDIES IN SPACE ASTRONOMY
Period Obligations
02/06/1990-10/31/1992 FY94: \$0 TOTAL: \$140,820
Prin. Invest. NASA Tech. Officer CASE Category
J SILK HQ/G S LEVY 11-Astronomy

NAGW 2000 University of California - Berkeley 2117
HEAT: A HIGH ENERGY ANTIMATTER TELESCOPE
Period Obligations
04/19/1990-10/31/1994 FY94: \$150,000 TOTAL: \$710,000
Prin. Invest. NASA Tech. Officer CASE Category
P B PRICE HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 2029 University of California - Berkeley 2118
INSTRUMENT DEVELOPMENT AND SCIENTIFIC APPLICATIONS OF THE EXTREME ULTRAVIOLET IMAGING TELESCOPE ARR
Period Obligations
04/02/1990-01/31/1995 FY94: \$61,000 TOTAL: \$339,000
Prin. Invest. NASA Tech. Officer CASE Category
O SIEGMUND HQ/G CLAYTON 11-Astronomy

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NAGW 2104 University of California - Berkeley 2119
 DESIGN STUDIES FOR THE HNC EXPERIMENT ON THE MIR SPACE STATION
Period Obligations
 06/06/1990-10/31/1994 FY94: \$100,000 TOTAL: \$718,301
Prin. Invest. NASA Tech. Officer CASE Category
 P B PRICE HQ/W V JONES 13-Physics
 HQ/J C LING

NAGW 2115 University of California - Berkeley 2120
 NAGW-2115/UNIV OF CA /A. BERKELEY/A SCINTILLATION IMAGING GAS-FILLED HARD X-RAY TELESCOPE (SIGHT)
Period Obligations
 06/06/1990-10/31/1994 FY94: \$255,970 TOTAL: \$1,434,890
Prin. Invest. NASA Tech. Officer CASE Category
 B SADOBLET HQ/L J KALUZIENSKI 11-Astronomy
 HQ/A N BUNNER

NAGW 2121 University of California - Berkeley 2121
 FAR INFRARED ALL-SKY SURVEY
Period Obligations
 05/18/1990-01/31/1995 FY94: \$73,000 TOTAL: \$448,000
Prin. Invest. NASA Tech. Officer CASE Category
 P RICHARDS HQ/G LEVY 31-Atmos Sci

NAGW 2413 University of California - Berkeley 2122
 DYNAMICS OF POLAR CAP ACCRETION ONTO NEUTRON STARS
Period Obligations
 03/29/1991-12/31/1994 FY94: \$71,332 TOTAL: \$491,972
Prin. Invest. NASA Tech. Officer CASE Category
 J ARONS HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2452 University of California - Berkeley 2123
 STUDIES OF ENERGETIC ELECTRONS IN SOLAR FLARES
Period Obligations
 04/19/1991-03/31/1994 FY94: \$0 TOTAL: \$285,565
Prin. Invest. NASA Tech. Officer CASE Category
 K A ANDERSON HQ/W J WAGNER 13-Physics
 HQ/K LANG

NAGW 2478 University of California - Berkeley 2124
 MULTI WAVELENGTH STUDIES OF HOT DA WHITE DWARFS
Period Obligations
 05/09/1991-04/30/1995 FY94: \$172,000 TOTAL: \$335,000
Prin. Invest. NASA Tech. Officer CASE Category
 D S FINLEY HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2516 University of California - Berkeley 2125
 NEW METHODS FOR INVERSION AND ANALYSIS OF SOLAR FREQUENCY OSCILLATION DATA
Period Obligations
 07/10/1991-12/31/1994 FY94: \$30,000 TOTAL: \$283,332
Prin. Invest. NASA Tech. Officer CASE Category
 B B STARK HQ/W WAGNER 13-Physics
 HQ/K LANG

NAGW 2592 University of California - Berkeley 2126
 NAGW-2592/UNIV OF CA/ST X-RAY SPECTROSCOPY OF ACCRETION-POWERED SOURCES
Period Obligations
 08/07/1991-04/30/1995 FY94: \$147,000 TOTAL: \$420,000
Prin. Invest. NASA Tech. Officer CASE Category
 S M KAHN HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2640 University of California - Berkeley 2127
 DEVELOPMENT OF HIGH EFFICIENCY MICROCHANNEL PLATE DETECTORS W/ HIGH SPATIAL RESOLUTION
Period Obligations
 08/20/1991-12/31/1995 FY94: \$50,000 TOTAL: \$250,000
Prin. Invest. NASA Tech. Officer CASE Category
 O H SIEGMOND HQ/L KALUZIENSKI 13-Physics

NAGW 2688 University of California - Berkeley 2128
 HIGH ENERGY ASTROPHYSICS X-RAY ASTRONOMY RESEARCH AND ANALYSIS PROGRAM
Period Obligations
 08/20/1991-06/30/1994 FY94: \$0 TOTAL: \$455,000
Prin. Invest. NASA Tech. Officer CASE Category
 S M KAHN HQ/L J KALUZIENSKI 11-Astronomy

NAGW 2701 University of California - Berkeley 2129
 NAGW-2701/UNIV CA/STUDY OF THE DIFFUSE FAR ULTRAVIOLET BACKGROUND WITH AN INSTRUMENT FLOWN AS A DELTA SECOND
Period Obligations
 08/19/1991-09/30/1993 FY94: \$0 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
 C S BUNYER HQ/E J WEILER 11-Astronomy

NAGW 2722 University of California - Berkeley 2130
 THE DERENDIP III PIGGYBACK SETI PROGRAM
Period Obligations
 09/05/1991-12/31/1994 FY94: \$34,000 TOTAL: \$221,400
Prin. Invest. NASA Tech. Officer CASE Category
 C S BOWYER HQ/J D RUMMEL 11-Astronomy

NAGW 2763 University of California - Berkeley 2131
 INFRARED LASER SPECTROSCOPY OF CARBON CLUSTERS
Period Obligations
 11/08/1991-10/31/1994 FY94: \$69,685 TOTAL: \$208,458
Prin. Invest. NASA Tech. Officer CASE Category
 R J SAYKALLY HQ/J D RUMMEL 12-Chemistry

NAGW 2804 University of California - Berkeley 2132
 OBSERVATION, THEORETICAL, AND EXPERIMENTAL COSMOLOGY
Period Obligations
 12/13/1991-06/30/1995 FY94: \$150,000 TOTAL: \$260,000
Prin. Invest. NASA Tech. Officer CASE Category
 W WELCH HQ/J A NUTH 11-Astronomy

NAGW 2883 University of California - Berkeley 2133
 SOME NEW DIRECTIONS IN COMETARY SPECTROSCOPY
Period Obligations
 02/13/1992-11/30/1994 FY94: \$51,264 TOTAL: \$154,945
Prin. Invest. NASA Tech. Officer CASE Category
 H SPINRAD HQ/H C BRINTON 11-Astronomy

NAGW 2986 University of California - Berkeley 2134
 THE DYNAMICS OF LONG-LIVED PLANETARY VORTICES
Period Obligations
 03/20/1992-12/31/1993 FY94: \$0 TOTAL: \$159,187
Prin. Invest. NASA Tech. Officer CASE Category
 P S MARCUS HQ/W L QUAIDE 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2991 University of California - Berkeley 2135
CARBON CLUSTERS AND THEIR RELATIONSHIP TO INTERSTELLAR DUST
Period *Obligations*
03/20/1992-03/31/1994 FY94: \$60,000 TOTAL: \$240,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J SAYKALLY HQ/L J CAROFF 11-Astronomy

NAGW 3008 University of California - Berkeley 2136
STUDY OF IMPACT-WAVE DEPOSITS NEAR THE PROPOSED KT BOUNDARY IMPACT CRATER IN YUCATAN
Period *Obligations*
03/20/1992-02/31/1994 FY94: \$0 TOTAL: \$71,608
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W ALVAREZ HQ/J M BOYCE 32-Geological Sci

NAGW 3027 University of California - Berkeley 2137
THEORETICAL STUDIES OF X-RAY SPECTROSCOPY OF ACCRETION DISKS ASSOCIATED WITH ACTIVE GALACTIC NUCLEI
Period *Obligations*
04/03/1992-02/28/1994 FY94: \$0 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R I KLEIN HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 3107 University of California - Berkeley 2138
PHYSICAL AND CHEMICAL EVOLUTION OF PROTOSTELLAR DISKS
Period *Obligations*
06/15/1992-05/31/1995 FY94: \$48,920 TOTAL: \$139,454
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S W STAHLER HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3123 University of California - Berkeley 2139
NAGW-3123/UNIV CA/TO DEVELOP PART OF AN INSTRUMENT TO STUDY THE DIFFUSE EUV BACKGROUND
Period *Obligations*
07/02/1992-10/31/1994 FY94: \$100,000 TOTAL: \$629,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S BOWYER HQ/R STACHNIK 11-Astronomy
HQ/R V STACHNIK

NAGW 3154 University of California - Berkeley 2140
FROM THE MOONS OF JUPITER TO THE MILKY WAY
Period *Obligations*
07/30/1992-10/31/1993 FY94: \$0 TOTAL: \$4,981
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M COHEN HQ/L LAPIANA 11-Astronomy
HQ/C J PELLERIN JR

NAGW 3267 University of California - Berkeley 2141
NAGW-3267/UNIV CALIF BERKELEY/IMPROVEMENTS TO THE IRAS LOW RESOLUTION SPECTROMETER DATABASE
Period *Obligations*
11/16/1992-09/14/1994 FY94: \$0 TOTAL: \$34,661
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M COHEN HQ/G R RIEGLER 11-Astronomy

NAGW 3314 University of California - Berkeley 2142
NAGW-3314/UNIV CALIF BERKELEY/16TH TEXAS SYMPOSIUM AND 3RD INTERNAT SYMPOSIUM ON PARTICLES, STRINGS
Period *Obligations*
12/23/1992-12/31/1993 FY94: \$0 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B SADOULET HQ/L S LAPIANA 11-Astronomy

NAGW 3429 University of California - Berkeley 2143
THE PHYSICS OF FLARING ATMOSPHERES
Period *Obligations*
03/03/1993-01/14/1995 FY94: \$99,426 TOTAL: \$194,224
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G H FISHER HQ/W J WAGNER 13-Physics
HQ/G WITHROE

NAGW 3473 University of California - Berkeley 2144
STUDY OF HIGH TIME RESOLUTION
Period *Obligations*
03/01/1993-02/28/1994 FY94: \$0 TOTAL: \$81,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C A CATTELL HQ/M M MELLOTT 13-Physics
HQ/G L WITHBROE

NAGW 3514 University of California - Berkeley 2145
HISTORICAL STUDIES ON EXTRATERRESTRIAL MATERIALS
Period *Obligations*
04/09/1993-12/31/1996 FY94: \$130,000 TOTAL: \$299,569
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K NISHIZUMI HQ/J BOYCE 32-Geological Sci

NAGW 3595 University of California - Berkeley 2146
INFRARED SPECTROSCOPY OF PROTOSTELLAR WINDS
Period *Obligations*
05/21/1993-03/31/1995 FY94: \$50,000 TOTAL: \$100,127
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F H SHU HQ/J A NUTH III 19-Phys Sci, NEC

NAGW 3605 University of California - Berkeley 2147
TRANSDUCTION OF THE GRAVITY SIGNAL IN ROOTS OF CORN
Period *Obligations*
06/23/1993-03/31/1995 FY94: \$60,000 TOTAL: \$120,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L FELDMAN HQ/T W HALSTEAD 51-Biological Sci

NAGW 3639 University of California - Berkeley 2148
HIGH EFFICIENCY FAR ULTRAVIOLET PHOTOCATHODES
Period *Obligations*
06/04/1993-06/30/1995 FY94: \$45,000 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
O H SIEGMUND HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3664 University of California - Berkeley 2149
ACTIVE GRATING UV SPECTROSCOPY
Period *Obligations*
07/01/1993-03/31/1994 FY94: \$0 TOTAL: \$40,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S BOWYER HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3769 University of California - Berkeley 2150
ROLE OF BOREAL VEGETATION IN CONTROLLING ECOSYSTEM PROCESSES AND FEEDBACK TO CLIMATE
Period *Obligations*
09/29/1993-05/31/1996 FY94: \$250,000 TOTAL: \$250,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F S CHAPIN III HQ/D E WICKLAND 39-Env Sci, NEC
G B BONAN HQ/A C JANETOS

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 3802 University of California - Berkeley 2151
THE FIFTH INTERNATIONAL WORKSHOP ON LOW TEMPERATURE DETECTORS (LTD-5)
Period *Obligations*
10/13/1993-07/28/1994 FY94: \$5,000 TOTAL: \$5,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P B SADOULET HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 3816 University of California - Berkeley 2152
NAGW-3816/UNIV CALIF BERKELEY; ASTROPHYSICAL GAMMA RAY SPECTROSCOPY W/ THE HI-RESOLUTION GAMMA AND HA
Period *Obligations*
11/18/1993-10/31/1994 FY94: \$200,000 TOTAL: \$200,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R P LIN HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 3819 University of California - Berkeley 2153
NAGW-3819/UNIV CALIF BERKELEY;— DEVELOPMENT OF LOW REFLECTIVITY MATERIALS AND COATINGS FOR EUV AND FUV
Period *Obligations*
11/30/1993-12/31/1994 FY94: \$43,000 TOTAL: \$43,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
O H SIEGMUND HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3823 University of California - Berkeley 2154
NAGW-3823/UNIV CALIF BERKELEY; ADVANCED DELAY LINE DETECTOR TECHNOLOGY; 12/1/93 NEW AWARD
Period *Obligations*
11/30/1993-11/30/1994 FY94: \$85,000 TOTAL: \$85,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M L LAMPTON HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3827 University of California - Berkeley 2155
GALAXY EVOLUTION
Period *Obligations*
12/17/1993-12/31/1996 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J I SILK HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3845 University of California - Berkeley 2156
UNIV CALIF BERKELEY; NEW VIEWS OF THE GALAXY USING B STARS
Period *Obligations*
01/14/1994-12/31/1994 FY94: \$84,700 TOTAL: \$84,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B Y WELSH HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3869 University of California - Berkeley 2157
NITROGEN AND CARBON TRACE GASES/NAGW3869
Period *Obligations*
02/24/1994-10/31/1994 FY94: \$72,020 TOTAL: \$72,020
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P A MATSON HQ/D E WICKLAND 39-Env Sci, NEC
HQ/A C JANETOS

NAGW 3885 University of California - Berkeley 2158
A PILOT PROJECT ON THE INCLUSION OF GRADUATE STUDENTS OF EDUCATION IN THE DEVELOPMENT AND ASSESSMENT
Period *Obligations*
03/10/1994-02/28/1995 FY94: \$22,579 TOTAL: \$22,579
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C W CARLSON HQ/R A MULKEY 11-Astronomy
HQ/G R RIEGLER

NAGW 3917 University of California - Berkeley 2159
NAGE3917/MONITOR PROGRAM FOR JUPITER AT RADIOWAVELENGTHS
Period *Obligations*
03/29/1994-12/31/1994 FY94: \$33,600 TOTAL: \$33,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I DE PATER HQ/J H RAHE 11-Astronomy

NAGW 3977 University of California - Berkeley 2160
A TEACHER INTERNSHIP AND HARDWARE FOR A MULTIMEDIA CASE STUDY FOR THE BERKELEY SATELLITE CONNECTION
Period *Obligations*
05/13/1994-04/30/1995 FY94: \$5,000 TOTAL: \$5,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C A CATTELL HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 3978 University of California - Berkeley 2161
KINETIC ANALYSIS OF LOCALIZED LANGMUIR WAVES IN THE AURORAL ZONE
Period *Obligations*
05/13/1994-04/30/1996 FY94: \$65,300 TOTAL: \$65,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R P LIN HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 4095 University of California - Berkeley 2162
LONG DURATION BALLOON-BORNE OBSERVATIONS OF COSMIC MICROWAVE BACKGROUND ANISOTROPY
Period *Obligations*
08/24/1994-12/31/1995 FY94: \$125,000 TOTAL: \$125,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A E LANGE HQ/L J CAROFF 11-Astronomy

NAGW 4111 University of California - Berkeley 2163
A CONFERENCE ON THE PHYSICS OF THE INTERSTELLAR AND INTERGALACTIC
Period *Obligations*
08/22/1994-04/30/1995 FY94: \$11,000 TOTAL: \$11,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C F MCKEE HQ/L S LAPIANA 11-Astronomy

NAG10-80 University of California - Berkeley 2164
TRANSDUCTION OF THE GRAVITY SIGNAL IN THE ROOTS OF CORN
Period *Obligations*
02/18/1991-12/31/1993 FY94: \$0 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L FELDMAN KSC/W M KNOTT 55-Agriculture Sci

NAS 5-29298 University of California - Berkeley 2165
GSFC EXTREME ULTRAVIOLET INVESTIGATION FOR THE EXTREME ULTRAVIOLET EXPLORER
Period *Obligations*
06/19/1986-03/08/1996 FY94: \$3,230,000 TOTAL: \$44,302,523
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R MALINA GSFC/A J MILLER 11-Astronomy

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAS 5-30180 University of California - Berkeley 2166
EXTREME ULTRAVIOLET EXPLORER MISSION INVESTIGATION

Period	Obligations
07/17/1987-01/08/1997	FY94: \$3,075,000 TOTAL: \$14,395,982
Prin. Invest.	NASA Tech. Officer CASE Category
D HUNTEN	GSFC/A SMITH 11-Astronomy

NAS 5-30241 University of California - Berkeley 2167
ELECTRIC FIELD INVESTIGATION

Period	Obligations
01/07/1988-09/30/1994	FY94: \$67,624 TOTAL: \$472,706
Prin. Invest.	NASA Tech. Officer CASE Category
F S MOZER	GSFC/D GALOPPO 13-Physics

NAS 5-30366 University of California - Berkeley 2168
3-D PLASMA AND ENERGETIC PARTICLE ANALYZER EXPERIMENT WIND

Period	Obligations
02/16/1989-06/30/1995	FY94: \$482,700 TOTAL: \$5,051,200
Prin. Invest.	NASA Tech. Officer CASE Category
R LIN	GSFC/F WAINSCOTT 13-Physics

NAS 5-30367 University of California - Berkeley 2169
ELECTRIC FIELD INVESTIGATION FOR POLAR MISSION

Period	Obligations
02/16/1989-03/13/1995	FY94: \$314,000 TOTAL: \$4,736,400
Prin. Invest.	NASA Tech. Officer CASE Category
F S MOZER	GSFC/W C ANSELM 13-Physics

NAS 5-30801 University of California - Berkeley 2170
ISTP PROJECT'S ELECTRIC FIELDS AND WAVES

Period	Obligations
07/02/1990-12/31/1997	FY94: \$340,000 TOTAL: \$3,687,000
Prin. Invest.	NASA Tech. Officer CASE Category
F MOZER	GSFC/L CHRISTENSEN 31-Atmos Sci

NAS 5-31283 University of California - Berkeley 2171
FAST AURORAL SNAPSHOT EXPLORER (FAST)

Period	Obligations
01/10/1991-09/30/1994	FY94: \$4,285,000 TOTAL: \$13,459,000
Prin. Invest.	NASA Tech. Officer CASE Category
C W CARLSON	GSFC/R ALEMAN 41-Aero Engr

NAS 5-31429 University of California - Berkeley 2172
SYSTEM DESIGN PHASE OF REFLECTION GRATING ASSEMBLY

Period	Obligations
12/28/1990-09/30/2000	FY94: \$4,530,000 TOTAL: \$5,517,996
Prin. Invest.	NASA Tech. Officer CASE Category
S KAHN	GSFC/R DONNELLY 41-Aero Engr

NAS 5-32577 University of California - Berkeley 2173
MISSION

Period	Obligations
05/10/1977-06/30/1994	FY94: \$0 TOTAL: \$5,189,683
Prin. Invest.	NASA Tech. Officer CASE Category
S BOWYER	MSFC/T ONEIL 31-Atmos Sci
M LAMPTON	MSFC/R EADY

NCA 2-639 University of California - Berkeley 2174
LASER INTERFEROMETRIC INVESTIGATION OF THE SUPERSONIC PLUME BASE FLOW PROBLEM

Period	Obligations
07/17/1987-06/30/1993	FY94: \$0 TOTAL: \$80,000
Prin. Invest.	NASA Tech. Officer CASE Category
M HOLT	ARC/G S DEIWERT 41-Aero Engr

NCA 2-637 University of California - Berkeley 2175
STUDY OF THE COMPOSITION AND SIZE DISTRIBUTION OF INTERSTELLAR DUST

Period	Obligations
07/19/1991-08/31/1993	FY94: \$0 TOTAL: \$80,000
Prin. Invest.	NASA Tech. Officer CASE Category
C MCKEE	ARC/A G TIELENS 11-Astronomy

NCA 2-678 University of California - Berkeley 2176
FORMATION OF INTERSTELLAR AND COMETARY ICES

Period	Obligations
01/21/1992-10/29/1994	FY94: \$0 TOTAL: \$80,000
Prin. Invest.	NASA Tech. Officer CASE Category
I DE PATER	ARC/A G TIELENS 11-Astronomy

NCA 2-757 University of California - Berkeley 2177
STUDIES OF MESUR AEROSHELL CONFIGURATION IN HYPERSONIC RAREFIED FLOWS OF CO2

Period	Obligations
11/24/1992-09/30/1995	FY94: \$0 TOTAL: \$40,000
Prin. Invest.	NASA Tech. Officer CASE Category
F C HURLBUT	ARC/G S DEIWERT 41-Aero Engr
M HOLT	
V P CAREY	

NCA 2-763 University of California - Berkeley 2178
CHEMICAL MODELING OF THE ATMOSPHERES OF VENUS AND TRITON

Period	Obligations
11/23/1992-04/22/1993	FY94: \$0 TOTAL: \$27,056
Prin. Invest.	NASA Tech. Officer CASE Category
C S BOWYER	ARC/J B POLLACK 11-Astronomy
V A KRASNOPOLSKY	ARC/D P CRUIKSHANK

NCA 2-782 University of California - Berkeley 2179
FLIGHT OF DELTA WING IN LANDING MODE

Period	Obligations
02/12/1993-01/31/1994	FY94: \$0 TOTAL: \$40,000
Prin. Invest.	NASA Tech. Officer CASE Category
M HOLT	ARC/T HOLST 41-Aero Engr
A PACKARD	ARC/T EDWARDS

NCA 2-826 University of California - Berkeley 2180
STUDY OF ION-IMPLANTATION IN INTERSTELLAR DUST GRAINS

Period	Obligations
06/29/1993-08/31/1995	FY94: \$37,000 TOTAL: \$80,000
Prin. Invest.	NASA Tech. Officer CASE Category
C MCKEE	ARC/A TIELENS 11-Astronomy

NCC 2-36 University of California - Berkeley 2181
SELECTED TARGET SETI OBSERVATIONS USING VLBI TECHNIQUES AND PATTERN RECOGNITION STUDIES

Period	Obligations
11/01/1987-09/30/1992	FY94: \$0 TOTAL: \$774,324
Prin. Invest.	NASA Tech. Officer CASE Category
F SHU	ARC/H W JONES 99-Multi-Discip
J TARTER	ARC/J BILLINGHAM

NCC 2-86 University of California - Berkeley 2182
FLIGHT MGMT SYSTEM

Period	Obligations
09/01/1987-12/31/1994	FY94: \$50,000 TOTAL: \$1,769,845
Prin. Invest.	NASA Tech. Officer CASE Category
L STARK	ARC/S R ELLIS 99-Multi-Discip

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NCC 2-142 University of California - Berkeley 2183
DETECTION IDENTIFICATION AND PRECISE LOCATION OF INFRARED OBJECTS

Period	Obligations	
07/01/1981-05/31/1995	FY94: \$108,000	TOTAL: \$1,089,221
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C E HEILES	ARC/F C WITTENBORN	11-Astronomy
M COHEN	ARC/D GOORVITCH	

NCC 2-275 University of California - Berkeley 2184
RESEARCH ON THE APPLICATION OF FUZZY LOGIC TO SYSTEMS ANALYSIS AND CONTROL

Period	Obligations	
11/01/1987-09/30/1994	FY94: \$90,000	TOTAL: \$957,173
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L ZADEH	ARC/P E FRIEDLAND	22-Computer Science

NCC 2-548 University of California - Berkeley 2185
STAR FORMATION AND THE EVOLUTION OF ELLIPTICAL GAL

Period	Obligations	
07/01/1988-12/31/1994	FY94: \$245,082	TOTAL: \$1,799,586
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F H SHU	ARC/D J HOLLENBACH	11-Astronomy
	ARC/P CASSER	

NCC 2-550 University of California - Berkeley 2186
RESEARCH ON COMPUTER SYSTEM BENCHMARKING

Period	Obligations	
08/01/1988-09/14/1995	FY94: \$137,350	TOTAL: \$387,819
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A J SMITH	ARC/K G STEVENS	22-Computer Science

NCC 2-757 University of California - Berkeley 2187
TELEPRESENCE AND ITS RELATIONSHIP TO PERFORMANCE

Period	Obligations	
06/02/1992-01/31/1995	FY94: \$20,000	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L STARK	ARC/R B WELCH	69-Psych, NEC

NCC 2-838 University of California - Berkeley 2188
INTRODUCTION OF INNOVATIVE TECHNIQUES TO REDUCE SA TELLITE OPERATIONS COST IN THE EUVE SCIENCE

Period	Obligations	
01/10/1994-03/31/1995	FY94: \$50,000	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R MALINA	ARC/P E FRIEDLAND	22-Computer Science

NCC 2-5032 University of California - Berkeley 2189
PARALLEL INJECTION INTO A SUPERSONIC BASE FLOW

Period	Obligations	
02/03/1994-01/31/1996	FY94: \$40,000	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HOLT	ARC/G S DEIWERT	41-Aero Engr

NCC 2-5035 University of California - Berkeley 2190
LOW SPEED MOTION OF A DELTA WING INFLUENCED BY SURFACE AND JET CONTROLS

Period	Obligations	
02/16/1994-01/31/1996	FY94: \$40,000	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HOLT	ARC/T L HOLST	41-Aero Engr
A PACKARD		

NCC 2-5083 University of California - Berkeley 2191
DIAGNOSING ASTRONOMICAL ICES; GAS PHASE CHEMISTRY OF COMETS AND HOT CORES

Period	Obligations	
07/15/1994-06/30/1996	FY94: \$40,000	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
I DE PATER	ARC/A G TIELENS	11-Astronomy

NCC 2-5102 University of California - Berkeley 2192
REMOTE IMAGING AND GIS APPLIED TO SCHISTOSOMIASIS CONTROL

Period	Obligations	
09/21/1994-09/30/1995	FY94: \$40,000	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R C SPEAR	ARC/D L PETERSON	54-Env Biology

NCC 3-239 University of California - Berkeley 2193
MICROGRAVITY EFFECTS ON LAMINAR TURBULENT TRANSITION OF GAS JET DIFFUSION FLAMES

Period	Obligations	
12/16/1991-11/30/1994	FY94: \$23,765	TOTAL: \$170,866
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A C FERNANDEZ-PELLO	LERC/H D ROSS	46-Mech Engr

NCC 3-329 University of California - Berkeley 2194
EQUILIBRIUM FLUID INTERFACE BETWEEN UNDER LOW- AND ZERO-GRAVITY CONDITIONS

Period	Obligations	
11/30/1993-11/23/1994	FY94: \$100,023	TOTAL: \$100,023
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P CONCUS	LERC/M WEISLOGEL	21-Mathematics

NGR 5-3450 University of California - Berkeley 2195
ULTRA-SOFT WAVELENGTHS \$146,812

Period	Obligations	
05/28/1971-10/31/1995	FY94: \$250,000	TOTAL: \$10,296,114
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C S BOWYER	GSFC/L J EARLY	11-Astronomy
	GSFC/R H PLESS	

NGT 00-030-025 University of California - Berkeley 2196
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/31/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A P KINZIG	HQ/G ASRAR	39-Env Sci, NEC

NGT 00-030-048 University of California - Berkeley 2197
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/17/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M S TORN	HQ/D M BUTLER	39-Env Sci, NEC
J HARTE	HQ/G S WILSON	

NGT 00-030-083 University of California - Berkeley 2198
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/17/1991-02/28/1995	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S P ANDERSON	HQ/D M BUTLER	39-Env Sci, NEC
W E DIETRICH	HQ/G S WILSON	

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NGT 00-030-105 University of California - Berkeley 2199
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D E GRANGER HQ/G ASRAR 32-Geological Sci
HQ/D M BUTLER

NGT 00-030-107 University of California - Berkeley 2200
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/21/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
A JUELS HQ/G ASRAR 22-Computer Science
HQ/D M BUTLER

NGT 00-030-154 University of California - Berkeley 2201
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
S E HOBIE HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-165 University of California - Berkeley 2202
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/24/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
M E POWER HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-191 University of California - Berkeley 2203
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/27/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
W ALVAREZ HQ/G ASRAR 32-Geological Sci
HQ/D M BUTLER

NGT 00-030-212 University of California - Berkeley 2204
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/26/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
J HARTE HQ/D E WICKLAND 31-Atmos Sci
HQ/A C JANETOS

NGT 00-030-260 University of California - Berkeley 2205
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/21/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
P A MATSON HQ/A C JANETOS 39-Env Sci, NEC
HQ/G ASRAR

NGT 00-050-451 University of California - Berkeley 2206
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/04/1989-04/30/1993 FY94: \$0 TOTAL: \$61,999
Prin. Invest. NASA Tech. Officer CASE Category
F S MOZER HQ/F C OWENS 13-Physics

NGT 00-050-462 University of California - Berkeley 2207
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/11/1989-01/31/1993 FY94: \$0 TOTAL: \$61,180
Prin. Invest. NASA Tech. Officer CASE Category
B SADOULET HQ/F C OWENS 12-Chemistry

NGT 00-050-467 University of California - Berkeley 2208
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/14/1989-06/30/1993 FY94: \$0 TOTAL: \$62,000
Prin. Invest. NASA Tech. Officer CASE Category
S M KAHN HQ/F C OWENS 13-Physics

NGT 00-050-603 University of California - Berkeley 2209
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1990-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
P L RICHARDS HQ/F C OWENS 13-Physics

NGT 00-050-607 University of California - Berkeley 2210
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1990-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R P LIN HQ/F C OWENS 13-Physics

NGT 00-050-613 University of California - Berkeley 2211
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1990-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
S M KAHN HQ/F C OWENS 13-Physics

NGT 00-050-771 University of California - Berkeley 2212
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/25/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A E LANGE HQ/F C OWENS 13-Physics

NGT 00-050-783 University of California - Berkeley 2213
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/23/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
G F SMOOT HQ/F C OWENS 13-Physics

NGT 00-050-787 University of California - Berkeley 2214
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/10/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
S CHAKRABARTI HQ/F C OWENS 13-Physics

NGT 00-050-892 University of California - Berkeley 2215
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/05/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
L A ZADEU JPL/H ASHKENAS 29-Math/Computer, NEC

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NGT 00-050-913 University of California - Berkeley 2216
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/26/1992-06/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
P B PRICE HQ/J ALEXANDER 13-Physics

NGT 00-050-921 University of California - Berkeley 2217
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/09/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
H SPINRAD HQ/J ALEXANDER 11-Astronomy

NGT 00-050-939 University of California - Berkeley 2218
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/15/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R J SAYKALLY HQ/J K ALEXANDER 12-Chemistry

NGT 00-051-030 University of California - Berkeley 2219
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/22/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
M HOLT HQ/P HUNTER 46-Mech Engr

NGT 00-051-062 University of California - Berkeley 2220
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/27/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
O H SIEGMUND HQ/D HOLLAND 13-Physics

NGT 00-051-076 University of California - Berkeley 2221
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
A E LANGE HQ/D HOLLAND 13-Physics

NGT 00-051-082 University of California - Berkeley 2222
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
J R GRAHAM HQ/D HOLLAND 11-Astronomy

NGT 00-051-191 University of California - Berkeley 2223
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/29/1993-08/31/1996 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
F H SHU HQ/D HOLLAND 11-Astronomy

NGT 00-051-222 University of California - Berkeley 2224
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
M K FIRESTONE HQ/A NOVOTNY 51-Biological Sci

NGT 00-051-268 University of California - Berkeley 2225
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/17/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
A C HQ/G LESANE 46-Mech Engr
FERNANDEZ-PELLO

NGT 00-051-269 University of California - Berkeley 2226
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/17/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R PACKARD HQ/G LESANE 13-Physics

NGT 00-051-280 University of California - Berkeley 2227
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/17/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
L FELDMAN HQ/G LESANE 51-Biological Sci

NGT 00-051-287 University of California - Berkeley 2228
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/28/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R P LIN HQ/D HOLLAND 13-Physics

NGT 00-051-302 University of California - Berkeley 2229
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
F S MOZER HQ/D HOLLAND 13-Physics

NGT 00-051-303 University of California - Berkeley 2230
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/19/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
E HALLER HQ/D HOLLAND 45-Elec Engr

NGT 00-070-309 University of California - Berkeley 2231
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
06/22/1993-05/31/1996 FY94: \$22,000 TOTAL: \$41,760
Prin. Invest. NASA Tech. Officer CASE Category
M HOLT HQ/D K RUSSELL 46-Mech Engr

NGT 00-070-310 University of California - Berkeley 2232
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
06/22/1993-05/31/1995 FY94: \$22,000 TOTAL: \$43,000
Prin. Invest. NASA Tech. Officer CASE Category
F HURLEUT HQ/D K RUSSELL 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NGT 00-090-039 University of California - Berkeley 2233
MESA COMMUNITY COLLEGE PROGRAM

Period	Obligations
08/17/1992-07/14/1994	FY94: \$0 TOTAL: \$218,852
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
M DIAMOND	HQ/B WHITE CASE Category
	HQ/S MASSENBERG 99-Multi-Discip

NAG 1-1572 University of California - Davis 2234
STUDY OF THE MUTUAL INTERACTION BETWEEN A WING WAKE AND AN ENCOUNTERING AIRPLANE

Period	Obligations
01/27/1994-10/25/1995	FY94: \$44,131 TOTAL: \$44,131
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
C VANDAM	LARC/J M BRANDON CASE Category
	41-Aero Engr

NAG 2-587 University of California - Davis 2235
BIOLOGICAL RHYTHMS AND TEMPERATURE REGULATION IN RHESUS MONKEYS DURING SPACEFLIGHT

Period	Obligations
07/12/1989-04/30/1994	FY94: \$65,000 TOTAL: \$759,421
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
C A FULLER	ARC/J P CONNOLLY CASE Category
	ARC/R W BALLARD 51-Biological Sci

NAG 2-649 University of California - Davis 2236
THE EFFECTS OF WEIGHTLESSNESS ON BONE MINERALIZATION

Period	Obligations
06/29/1990-03/31/1993	FY94: \$0 TOTAL: \$119,362
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
R B MARTIN	ARC/S B ARNAUD CASE Category
	59-Life Sci, NEC

NAG 2-654 University of California - Davis 2237
ANALYTICAL HANDLING QUALITIES ASSESSMENT WITH APPLICATION TO AEROSPACECRAFT FLIGHT CONTROL

Period	Obligations
07/18/1990-09/30/1993	FY94: \$0 TOTAL: \$98,576
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
R A HESS	ARC/D T BERRY CASE Category
	41-Aero Engr

NAG 2-788 University of California - Davis 2238
GRAVITATIONAL FIELDS AND NEURAL SIGNALING IN THE HIPPOCAMPUS

Period	Obligations
05/29/1992-04/30/1995	FY94: \$48,500 TOTAL: \$145,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
J M HOROWITZ	ARC/C E WADE CASE Category
	51-Biological Sci

NAG 2-795 University of California - Davis 2239
EFFECTS OF CENTRIFUGE DIAMETER AND OPERATION ON RODENT ADAPTATION TO CHRONIC CENTRIFUGATION

Period	Obligations
08/28/1992-09/30/1994	FY94: \$100,000 TOTAL: \$380,044
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
C A FULLER	ARC/S M HING CASE Category
	ARC/B J CORBIN 59-Life Sci, NEC

NAG 2-801 University of California - Davis 2240
LIGHT AND GRAVITY EFFECTS ON CIRCADIAN RHYTHMS IN RHESUS MACAQUES

Period	Obligations
09/01/1992-06/30/1995	FY94: \$95,000 TOTAL: \$201,700
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
C A FULLER	ARC/J VERNIKOS CASE Category
	51-Biological Sci

NAG 2-840 University of California - Davis 2241
HOMEOSTATIC AND CIRCADIAN RESPONSES OF RHESUS MONKEYS DURING SPACEFLIGHT

Period	Obligations
06/11/1993-09/30/1994	FY94: \$170,000 TOTAL: \$219,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
J VERNIKOS	ARC/C M WINGET CASE Category
	51-Biological Sci

NAG 2-927 University of California - Davis 2242
A SYMPOSIUM ON FRONTIERS OF COMPUTATIONAL FLUID DYNAMICS

Period	Obligations
09/06/1994-09/30/1995	FY94: \$5,000 TOTAL: \$5,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
M HAFEZ	ARC/M OMURA CASE Category
	41-Aero Engr

NAG 2-4003 University of California - Davis 2243
DYNAMICS OF VARIABLE MASS SYSTEMS

Period	Obligations
12/01/1993-12/01/1994	FY94: \$75,000 TOTAL: \$75,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
F O EKE	ARC/K GUPTA CASE Category
	41-Aero Engr

NAG 3-1166 University of California - Davis 2244
FAULT TOLERANCE IN SPACE-BASED DIGITAL SIGNAL PROCESSING AND SWITCHING SYSTEMS

Period	Obligations
04/23/1990-09/30/1994	FY94: \$0 TOTAL: \$205,518
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
G R REDINEO	LERC/J M BUDINGER CASE Category
	LERC/J L HARROLD 45-Elec Engr

NAG 3-1558 University of California - Davis 2245
NOVEL FLOW CONFIGURATION FOR THE STUDY OF TURBULENT FLAME PROPAGATION

Period	Obligations
02/08/1994-02/07/1995	FY94: \$74,969 TOTAL: \$74,969
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
R C ALDREDGE	LERC/K J WEILAND CASE Category
	46-Mech Engr

NAG 5-1759 University of California - Davis 2246
VARIOUS ROSAT STUDIES (1) A SEARCH FOR COMPACT X-RAY SOURCES IN THREE CRAB-LIKE SNR

Period	Obligations
09/11/1991-09/14/1993	FY94: TOTAL: \$40,749
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
R H BECKER	GSFC/R PETRE CASE Category
	11-Astronomy

NAG 5-1876 University of California - Davis 2247
THE SUPERNOVA REMNANT KES 79

Period	Obligations
01/23/1992-02/14/1994	FY94: \$0 TOTAL: \$49,325
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
R H BECKER	GSFC/R PETRE CASE Category
	11-Astronomy

NAG 5-2421 University of California - Davis 2248
SHOCK HIGH ENERGY EMISSION FROM THE BE-STAR/PULSAR SYSTEM PSR 1259-63

Period	Obligations
11/06/1993-11/14/1995	FY94: \$34,860 TOTAL: \$34,860
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
R H BECKER	GSFC/J P NORRIS CASE Category
M TAVANI	11-Astronomy

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 5-2433 University of California - Davis 2249
 USING MID-INFRARED DATA TO TEST CURRENT THEORIES OF
 GIGAHERTZ PEAKED-SPECTRUM RADIO WAVES
Period Obligations
 11/16/1993-11/30/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
 R H BECKER GSFC/D WEST 11-Astronomy

NAGW 4016 University of California - Davis 2257
 TIME-RESOLVED FTIR EMISSION STUDIES OF RADICAL CHEMISTRY
 RELEVANT TO THE JOVIAN ATMOSPHERE
Period Obligations
 05/25/1994-02/28/1995 FY94: \$38,400 TOTAL: \$38,400
Prin. Invest. NASA Tech. Officer CASE Category
 W JACKSON HQ/J H RAHE 12-Chemistry

NAG 8-871 University of California - Davis 2250
 LIFE CYCLES OF TRANSIENT PLANETARY WAVES
Period Obligations
 03/27/1991-12/31/1994 FY94: \$0 TOTAL: \$186,827
Prin. Invest. NASA Tech. Officer CASE Category
 T R NATHAN MSFC/J W KAUFMAN 31-Atmos Sci

NAS 5-31359 University of California - Davis 2258
 EOS-BIOSPHERE-ATMOSPHERE INTERACTIONS STUDY
Period Obligations
 11/05/1991-12/31/1999 FY94: \$68,000 TOTAL: \$201,400
Prin. Invest. NASA Tech. Officer CASE Category
 S USTIN GSFC/P SELLERS 31-Atmos Sci

NAG 8-1054 University of California - Davis 2251
 EXTERNAL FORCING IN TROPICAL-EXTRATROPICAL INTER-
 ACTIONS
Period Obligations
 03/17/1994-12/31/1994 FY94: \$31,873 TOTAL: \$31,873
Prin. Invest. NASA Tech. Officer CASE Category
 T R NATHAN MSFC/J KAUFMAN 31-Atmos Sci

NAS 5-31714 University of California - Davis 2259
 EOS INVESTIGATION - ATMOSPHERIC INFRARED SOUNDER (AIRS)
 TEAM MEMBER INVESTIGATION
Period Obligations
 02/17/1992-12/14/2001 FY94: \$150,000 TOTAL: \$550,000
Prin. Invest. NASA Tech. Officer CASE Category
 S USTIN GSFC/T BRAKKE 32-Geological Sci

NAG 9-605 University of California - Davis 2252
 RESPONSE OF THE MALE GERM CELL IN MICE TO ACUTE IR
 RADIATION WITH 600 MEV56FE NUCLEI
Period Obligations
 05/05/1992-10/01/1994 FY94: \$0 TOTAL: \$117,000
Prin. Invest. NASA Tech. Officer CASE Category
 L WILEY JSC/D MORRISON 51-Biological Sci

NCA 2-581 University of California - Davis 2260
 DRAG PREDICTION THROUGH CFD AT HIGH SPEEDS
Period Obligations
 01/22/1991-07/31/1993 FY94: \$0 TOTAL: \$70,000
Prin. Invest. NASA Tech. Officer CASE Category
 C P VAN DAM ARC/T EDWARDS 41-Aero Engr

NAGW 903 University of California - Davis 2253
 LASER STUDIES OF PHOTODISSOCIATION DYNAMICS
Period Obligations
 06/01/1986-11/30/1994 FY94: \$75,000 TOTAL: \$503,999
Prin. Invest. NASA Tech. Officer CASE Category
 W M JACKSON HQ/J T BERGSTRALH 31-Atmos Sci
 HQ/W L QUAIDE

NCA 2-628 University of California - Davis 2261
 AN ENTROPY BASED APPROACH TO UNCONDITIONALLY STABLE
 MULTIGRID METHOD
Period Obligations
 06/24/1991-06/30/1993 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 J J CHATTOT ARC/M L MERRIAM 41-Aero Engr

NAGW 1119 University of California - Davis 2254
 ROLE OF PREBIOTIC AMPHIPHILIC MOLECULES IN EVOLUTION
Period Obligations
 06/01/1987-01/31/1995 FY94: \$115,000 TOTAL: \$634,569
Prin. Invest. NASA Tech. Officer CASE Category
 D W DEAMER HQ/J D RUMMEL 12-Chemistry

NCA 2-644 University of California - Davis 2262
 SIMULATION OF INVISCID COMPRESSIBLE FLOWS WITH SHO CKS
 USING ACCURATE COMPACT SCHEMES
Period Obligations
 08/01/1991-09/30/1993 FY94: \$0 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 M HAFEZ ARC/R M HICKS 41-Aero Engr

NAGW 1144 University of California - Davis 2255
 LABORATORY SIMULATION OF THE SURFACE OF HALLEY'S
 COMET
Period Obligations
 07/01/1987-12/31/1993 FY94: \$0 TOTAL: \$243,349
Prin. Invest. NASA Tech. Officer CASE Category
 W M JACKSON HQ/H C BRINTON 11-Astronomy
 HQ/J H RAHE

NCA 2-655 University of California - Davis 2263
 ACCELERATED OVERSET GRID GENERATION FOR RAPID DESI GN
 STUDIES WITH CFD
Period Obligations
 09/11/1991-08/31/1993 FY94: \$0 TOTAL: \$69,461
Prin. Invest. NASA Tech. Officer CASE Category
 M M HAFEZ ARC/R L SORENSON 41-Aero Engr
 ARC/W R VAN DALSEN

NAGW 2636 University of California - Davis 2256
 MONITORING SUCCESSIONAL AND HYDROLOGICAL TRENDS IN
 FIRE-DISTURBED BLACK SPRUCE FORESTS
Period Obligations
 09/16/1991-06/30/1994 FY94: \$0 TOTAL: \$91,235
Prin. Invest. NASA Tech. Officer CASE Category
 S USTIN HQ/R H THOMAS 39-Env Sci, NEC
 HQ/D M BUTLER

NCA 2-676 University of California - Davis 2264
 TURBULENT BOUNDARY LAYER STRUCTURE IN AN ADVERSE
 PRESSURE ARADIANT
Period Obligations
 12/23/1991-06/30/1993 FY94: \$0 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
 B R WHITE ARC/D M DRIVER 41-Aero Engr

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NCA 2-728 University of California - Davis 2265
DETER OF SURFACE ROUGHNESS EFFECT AND ATMOSPHERIC
STABILITY ON SALTATION THRESHOLD COND FOR MARS EAR

Period	Obligations	
06/30/1992-06/30/1994	FY94: \$0	TOTAL: \$58,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B R WHITE	ARC/B SMITH	41-Aero Engr

NCA 2-737 University of California - Davis 2266
COUPLING OF POTENTIAL AND NAVIER-STOKES SOLVERS FOR THE
SOLUTION OF ROTOR PERFORMANCE PROBLEMS

Period	Obligations	
07/23/1992-12/31/1994	FY94: \$0	TOTAL: \$35,056
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M M HAFEZ	ARC/F CARADONNA	46-Mech Engr

NCA 2-760 University of California - Davis 2267
DEVELOPMENT OF EFFICIENT CODE FOR ACCURATE ANALYSIS
AND DESIGN OF COMPLEX AIRCRAFT CONFIGURATION

Period	Obligations	
11/10/1992-01/31/1994	FY94: \$0	TOTAL: \$40,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HAFEZ	ARC/P GELHAUSEN	41-Aero Engr

NCA 2-774 University of California - Davis 2268
COMPARISON OF COMPUTED ELECTROMAGNETIC FIELD OBTAINED
USING THE CHIMERA METHOD AND AN UNSTRUC. GRID

Period	Obligations	
12/01/1992-11/30/1993	FY94: \$0	TOTAL: \$35,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J J CHATTOT	ARC/P GOORJIAN	41-Aero Engr

NCA 2-775 University of California - Davis 2269
USE OF CFD AND CEM METHODS IN OPTIMIZED MULTIDISCIPLINARY
DESIGN

Period	Obligations	
12/02/1992-11/30/1993	FY94: \$0	TOTAL: \$35,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C P VAN DAM	ARC/P GOORJIAN	41-Aero Engr
H DWYER		

NCA 2-776 University of California - Davis 2270
ACCURATE NUMERICAL SCHEMES FOR INTEGRATION OF MAXWELL'S
EQUATIONS

Period	Obligations	
12/01/1992-11/30/1993	FY94: \$0	TOTAL: \$35,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HAFEZ	ARC/P GOORJIAN	41-Aero Engr

NCA 2-780 University of California - Davis 2271
COMPUTATIONAL MODELING OF FEMTOSECOND OPTICAL SOLUTIONS
FROM FULL VECTOR NONLINEAR MAXWELL EQUATIONS

Period	Obligations	
01/11/1993-01/14/1995	FY94: \$14,900	TOTAL: \$39,400
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A KNOESEN	ARC/P GOORJIAN	45-Elec Engr

NCA 2-789 University of California - Davis 2272
NUMERICAL SIMULATION OF FLOW ABOUT HELICOPTER FUSELAGES

Period	Obligations	
02/04/1993-10/14/1993	FY94: \$0	TOTAL: \$27,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HAFEZ	ARC/E P DUQUE	41-Aero Engr

NCA 2-804 University of California - Davis 2273
POPULATION DETERMINATIONS FOR GRAPES (GRAPEVINE RE-
MOTE SENSING ANALYSIS OF PHYLLOXERA EARLY STRESS)

Period	Obligations	
04/02/1993-04/14/1994	FY94: \$0	TOTAL: \$34,802
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J GRANETT	ARC/J SALUTE	55-Agriculture Sci
J DEBENEDICTIS		

NCA 2-837 University of California - Davis 2274
NUMERICAL STUDY OF FAR FIELD NOISE PROPAGATION OF A
ROTOR IN HOVER

Period	Obligations	
08/25/1993-10/31/1994	FY94: \$0	TOTAL: \$14,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J J CHATTOT	ARC/F X CARADONNA	41-Aero Engr

NCC 1-163 University of California - Davis 2275
FLOW PREDICTIONS OVER MULTI-ELEMENT HIGH-LIFT SYSTEMS

Period	Obligations	
04/06/1992-12/31/1994	FY94: \$35,934	TOTAL: \$88,569
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C P VAN DAM	LARC/L P YIP	41-Aero Engr

NCC 2-99 University of California - Davis 2276
EFFICIENT CROP PRODUCTION USING UREA AMMONIA NITRITE
AND NITRATE IN CLOSED ENVIRONMENTAL LIFE SUPPORT SYSTEMS

Period	Obligations	
10/01/1980-11/30/1993	FY94: \$0	TOTAL: \$947,483
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R C HUFFAKER	ARC/R D MACELROY	55-Agriculture Sci
D W RAINS		
C O QUALSET		

NCC 2-624 University of California - Davis 2277
TECHNIQUES FOR THE DESIGN OF HIGH-BANDWIDTH ROTORCRAFT
FLIGHT CONTROL SYSTEMS

Period	Obligations	
07/20/1989-06/30/1993	FY94: \$0	TOTAL: \$239,242
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A HESS	ARC/M B TISCHLER	41-Aero Engr
P GORDER	ARC/J V LEBACQZ	

NCC 2-819 University of California - Davis 2278
DEVELOPMENT AND MAINTENANCE OF PERCEPTUAL PROCEDURAL
AND MANUAL SKILLS IN AUTOMATED FLIGHT DECKS

Period	Obligations	
08/11/1993-12/31/1994	FY94: \$43,320	TOTAL: \$61,320
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A HESS	ARC/S M CASNER	69-Psych, NEC

NCC 2-860 University of California - Davis 2279
USE OF REMOTE SENSING SURVEILLANCE TO MONITOR
ENVIRONMENTAL PARAMETERS ASSOCIATED WITH MOSQUITO

Period	Obligations	
06/16/1994-03/31/1995	FY94: \$85,566	TOTAL: \$85,566
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R K WASHINO	ARC/D L PETERSON	54-Env Biology

NCC 2-873 University of California - Davis 2280
NUMERICAL STUDY OF TIP VORTEX FLOWS

Period	Obligations	
08/29/1994-07/31/1995	FY94: \$78,223	TOTAL: \$78,223
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HAFEZ	ARC/D KWAK	41-Aero Engr

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NCC 2-5004 University of California - Davis 2281
PRISMATIC GRID GENERATION AND VALIDATION
Period Obligations
 10/07/1993-09/30/1994 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 J CHATTOT ARC/C MAKSYMUK 41-Aero Engr
 M HAFEZ

NCC 2-5054 University of California - Davis 2289
A MICROFABRICATED PHOTOMETRIC CO2 SENSING SYSTEM; THE IR SOURCE
Period Obligations
 05/19/1994-05/31/1995 FY94: \$39,973 TOTAL: \$39,973
Prin. Invest. NASA Tech. Officer CASE Category
 R L SMITH ARC/J HINES 59-Life Sci, NEC

NCC 2-5012 University of California - Davis 2282
PRACTICAL AERODYNAMIC SHAPE OPTIMIZATION BASED ON CONTROL THEORY
Period Obligations
 11/24/1993-11/15/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 M HAFEZ ARC/R HICKS 41-Aero Engr

NCC 2-5061 University of California - Davis 2290
NUMERICAL SIMULATION OF HELICOPTER ENGINE PLUME IN FORWARD FLIGHT
Period Obligations
 06/03/1994-09/30/1994 FY94: \$7,539 TOTAL: \$7,539
Prin. Invest. NASA Tech. Officer CASE Category
 C VAN DAM ARC/E P DUQUE 41-Aero Engr

NCC 2-5027 University of California - Davis 2283
NUMERICAL SOLUTION OF THE FULL POTENTIAL EQUATION FOR THE PREDICTION OF TRANSONIC AND SUPERSONIC WAV
Period Obligations
 01/14/1994-12/31/1994 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 M HAFEZ ARC/P A GELHAUSEN 41-Aero Engr

NCC 2-5079 University of California - Davis 2291
FUNDAMENTAL INVESTIGATION OF THE WATER-PROOFING OF SILICA SURFACES
Period Obligations
 06/30/1994-06/30/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 B J MCCOY ARC/D CAGLIOSTRO 43-Chem Engr

NCC 2-5042 University of California - Davis 2284
DESIGN METHODOLOGY FOR MULTI-ELEMENT HIGH-LIFT SYSTEMS ON SUBSONIC CIVIL TRANSPORT AIRCRAFT
Period Obligations
 03/18/1994-05/31/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 C P VAN DAM ARC/P A GELHAUSEN 41-Aero Engr

NCC 2-5085 University of California - Davis 2292
GRID ADAPTATION TECHNIQUES FOR PRACTICAL FLOW SIMULATIONS
Period Obligations
 07/28/1994-07/31/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 M HAFEZ ARC/P BUNING 41-Aero Engr

NCC 2-5043 University of California - Davis 2285
PARALLELIZATION OF A PARABOLIZED NAVIER-STOKES SOLVER FOR PERFECT GAS CALCULATIONS
Period Obligations
 04/11/1994-03/31/1995 FY94: \$38,564 TOTAL: \$38,564
Prin. Invest. NASA Tech. Officer CASE Category
 J J CHATTOT ARC/S L LAWRENCE 41-Aero Engr

NCC 2-5086 University of California - Davis 2293
ANALYSIS AND CONTROL OF MESH-GENERATED ERRORS
Period Obligations
 07/26/1994-07/14/1995 FY94: \$7,539 TOTAL: \$7,539
Prin. Invest. NASA Tech. Officer CASE Category
 J J CHATTOT ARC/D S CHAUSSEE 29-Math/Computer, NEC

NCC 2-5046 University of California - Davis 2286
LEAF REFLECTANCE PATTERNS RELATING TO PHYLLOXERA INFESTATIONS FOR G.R.A.P.E.S.
Period Obligations
 04/20/1994-11/15/1994 FY94: \$27,187 TOTAL: \$27,187
Prin. Invest. NASA Tech. Officer CASE Category
 J GRANETT ARC/J SALUTE 39-Env Sci, NEC
 ARC/C HLAVKA

NCC 2-5090 University of California - Davis 2294
THERMAL STABILITY OF SURFACE COATING SYSTEMS
Period Obligations
 08/08/1994-08/14/1995 FY94: \$15,367 TOTAL: \$15,367
Prin. Invest. NASA Tech. Officer CASE Category
 Z MUNIR ARC/D CAGLIOSTRO 47-Materials Engr
 B MCCOY

NCC 2-5049 University of California - Davis 2287
PARALLEL COMPUTATIONS OF WING CONFIGURATIONS
Period Obligations
 05/06/1994-04/30/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 M M HAFEZ ARC/T HOLST 41-Aero Engr

NCC 3-245 University of California - Davis 2295
COMBUSTION EXPERIMENTS IN REDUCED GRAVITY WITH TWO-COMPONENT MISCIBLE DROPLETS
Period Obligations
 12/30/1991-04/19/1995 FY94: \$45,996 TOTAL: \$208,594
Prin. Invest. NASA Tech. Officer CASE Category
 B D SHAW LERC/J B HAGGARD 46-Mech Engr
 LERC/H D ROSS

NCC 2-5050 University of California - Davis 2288
ACCURATE AND EFFICIENT CALCULATIONS OF SONIC BOOM SIGNATURE
Period Obligations
 05/06/1994-04/30/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 M M HAFEZ ARC/EITU 41-Aero Engr

NCC 3-353 University of California - Davis 2296
ELECTROHYDRODYNAMIC POOLING IN REDUCED GRAVITY
Period Obligations
 06/29/1994-06/28/1995 FY94: \$131,385 TOTAL: \$131,385
Prin. Invest. NASA Tech. Officer CASE Category
 B D SHAW LERC/F P CHIARAMONTE 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NGT 00-030-153 University of California - Davis 2297
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
E C CORDERO HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-167 University of California - Davis 2298
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/24/1993-08/31/1996 FY94: \$0 TOTAL: \$21,782
Pnn. Invest. NASA Tech. Officer CASE Category
T W FAN HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-200 University of California - Davis 2299
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/26/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
B C WEARE HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-090-152 University of California - Davis 2300
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
11/16/1992-08/14/1993 FY94: TOTAL: \$11,175
Pnn. Invest. NASA Tech. Officer CASE Category
R CRIDDLE HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-153 University of California - Davis 2301
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
11/16/1992-08/14/1994 FY94: \$12,000 TOTAL: \$24,000
Pnn. Invest. NASA Tech. Officer CASE Category
R CRIDDLE HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-240 University of California - Davis 2302
UGSRP
Period Obligations
01/11/1994-12/14/1994 FY94: \$12,000 TOTAL: \$12,000
Pnn. Invest. NASA Tech. Officer CASE Category
R CRIDDLE HQ/D K RUSSELL 99-Multi-Discip

NAG 1-668 University of California - Irvine 2303
A LARGE-SCALE EMPIRICAL STUDY OF ERROR DETECTION USING SELF-TEST
Period Obligations
04/07/1986-03/31/1994 FY94: TOTAL: \$852,828
Pnn. Invest. NASA Tech. Officer CASE Category
N G LEVESON LARC/D E ECKHARDT JR
22-Computer Science

NAG 1-783 University of California - Irvine 2304
TRACE GAS ANALYSIS FROM THE DC-8 AIRCRAFT
Period Obligations
06/16/1987-02/20/1994 FY94: \$0 TOTAL: \$1,274,194
Pnn. Invest. NASA Tech. Officer CASE Category
F S ROWLAND LARC/J M HOELL 31-Atmos Sci
LARC/J W DREWRY

NAG 1-1515 University of California - Irvine 2305
THEORETICAL STUDIES OF THE CURRENT AIRCRAFT FLEET EXHAUST IN A 3-D TRACER MODEL AND SCATTERED RAD.
Period Obligations
06/04/1993-06/03/1995 FY94: \$61,000 TOTAL: \$114,000
Pnn. Invest. NASA Tech. Officer CASE Category
M J PRATHER LARC/W L GROSE 31-Atmos Sci
LARC/E E REMSBERG

NAG 1-1533 University of California - Irvine 2306
TRACE GAS ANALYSIS FROM THE DC-8 AIRCRAFT: DATA ANALYSIS FOR PEM-WEST B NLPN 93-419
Period Obligations
07/19/1993-07/31/1995 FY94: \$165,370 TOTAL: \$351,075
Pnn. Invest. NASA Tech. Officer CASE Category
F S ROWLAND LARC/J W DREWRY 31-Atmos Sci
D R BLAKE LARC/J M HOELL

NAG 1-1619 University of California - Irvine 2307
SPRAY ATOMIZATION AND DEPOSITION PROCESSING OF AL-LI AND AL-MG STRUCTURAL MATERIALS
Period Obligations
05/24/1994-05/23/1995 FY94: \$104,743 TOTAL: \$104,743
Pnn. Invest. NASA Tech. Officer CASE Category
E J LAVERNIA LARC/W D BREWER 47-Materials Engr
LARC/D M ROYSTER

NAG 1-1644 University of California - Irvine 2308
PEM-EAST AND PEM-CENTRAL 1996 CANISTER FABRICATION
Period Obligations
09/30/1994-09/30/1995 FY94: \$100,000 TOTAL: \$100,000
Pnn. Invest. NASA Tech. Officer CASE Category
F S ROWLAND LARC/J W DREWRY 31-Atmos Sci
D R BLAKE LARC/J M HOELL

NAG 2-555 University of California - Irvine 2309
EFFECTS OF ZERO GRAVITY EXPOSURE ON THE OXIDATIVE CAPACITY OF SKELETAL MUSCLE FIBER-TYPES
Period Obligations
10/15/1988-06/30/1994 FY94: \$0 TOTAL: \$888,083
Pnn. Invest. NASA Tech. Officer CASE Category
K M BALDWIN ARC/A D MANDEL 51-Biological Sci
ARC/C M WINGET

NAG 3-627 University of California - Irvine 2310
IGNITION AND FLAME SPREAD OF LIQUID FUEL POOLS IN REDUCED GRAVITY
Period Obligations
03/04/1985-02/28/1997 FY94: \$95,595 TOTAL: \$766,987
Pnn. Invest. NASA Tech. Officer CASE Category
W A SIRIGNANO LERC/H D ROSS 49-Engr, NEC
LERC/R SACKSTEDGR

NAG 3-1110 University of California - Irvine 2311
DETAILED STUDIES OF THE QUICK MIXING REGION IN RICH BURN LOW-NOX COMBUSTION
Period Obligations
01/04/1990-10/20/1995 FY94: \$131,690 TOTAL: \$600,152
Pnn. Invest. NASA Tech. Officer CASE Category
G S SAMUELSEN LERC/J D HOLDEMAN 41-Aero Engr
J J VALENTINI
W A SOWA

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 3-1124 University of California - Irvine 2312
DETAILED STUDIES OF DOME REGION FUEL/AIR MIXING IN RICH
AND LEAN BURN LOW-NOX COMBUSTION
Period Obligations
01/04/1990-01/20/1995 FY94: \$126,517 TOTAL: \$661,711
Prin. Invest. NASA Tech. Officer CASE Category
G S SAMUELSEN LERC/R R TALINA 41-Aero Engr
J J VALENTINI
W A SONA

NAG 3-1605 University of California - Irvine 2313
EFFECTS OF GRAVITY ON SHEARED AND NON SHEARED TURB
ULENT NONPREMIXED FLAMES
Period Obligations
05/23/1994-05/22/1995 FY94: \$109,413 TOTAL: \$109,413
Prin. Invest. NASA Tech. Officer CASE Category
S E ELGHOBASHI LERC/H D ROSS 46-Mech Engr
K K NOMURA

NAG 5-1840 University of California - Irvine 2314
THE EFFECT OF CLIMATE ON THE STORAGE AND TURNOVER OF
CARBON IN SOIL
Period Obligations
12/02/1991-12/31/1993 FY94: \$0 TOTAL: \$207,000
Prin. Invest. NASA Tech. Officer CASE Category
S TRUMBORE GSFC/L WALTER 39-Env Sci, NEC

NAG 5-1897 University of California - Irvine 2315
SCIENTIFIC COMPUTING IN A RELIABLE MASSIVELY PARAL LEL
PROCESSOR
Period Obligations
02/20/1992-09/30/1993 FY94: \$0 TOTAL: \$111,308
Prin. Invest. NASA Tech. Officer CASE Category
I D SCHERSON GSFC/J E DORBAND 22-Computer Science
GSFC/J R FISCHER

NAG 5-2257 University of California - Irvine 2316
STRUCTURE AND DYNAMICS OF THE CORONAL MAGNETIC FIE LD
Period Obligations
04/27/1993-04/30/1995 FY94: \$260,358 TOTAL: \$395,757
Prin. Invest. NASA Tech. Officer CASE Category
G V HOVEN GSFC/T J BIRMINGHAM 13-Physics
GSFC/J D BOHLIN

NAG 5-2306 University of California - Irvine 2317
INPUT, ACCUMULATION AND TURNOVER OF CARBON IN BORE AL
FOREST SOILS
Period Obligations
07/01/1993-07/14/1995 FY94: \$181,000 TOTAL: \$231,000
Prin. Invest. NASA Tech. Officer CASE Category
S TRUMBORE GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 5-2561 University of California - Irvine 2318
A METHODOLOGY FOR PERFORMANCE EVALUATION OF SUPERC
OMPUTERS
Period Obligations
03/15/1994-03/31/1995 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest. NASA Tech. Officer CASE Category
I D SHERSON GSFC/J E DORBAND 45-Elec Engr
GSFC/J R FISCHER

NAG 5-2724 University of California - Irvine 2319
TROPOPAUSE MIXING AND CHEMISTRY: THE IMPACT OF NOX
INJECTIONS
Period Obligations
09/21/1994-09/30/1995 FY94: \$3,474 TOTAL: \$3,474
Prin. Invest. NASA Tech. Officer CASE Category
M J PRATHER GSFC/R W STEWART 31-Atmos Sci

NAG 9-725 University of California - Irvine 2320
SUPERVISORY CONTROLLED TELEROBOTIC SYSTEM
Period Obligations
04/07/1994-04/01/1996 FY94: \$148,326 TOTAL: \$148,326
Prin. Invest. NASA Tech. Officer CASE Category
G L LONG JSC/L H LI 49-Engr, NEC

NAGW 452 University of California - Irvine 2321
LATITUDINAL GRADIENTS IN TROPOSPHERIC CONCENTRATIONS OF
SELECTED HOLOCARBONS AND HYDROCARBONS
Period Obligations
04/27/1983-01/14/1995 FY94: \$211,477 TOTAL: \$1,966,791
Prin. Invest. NASA Tech. Officer CASE Category
F S ROWLAND HQ/M J KURYLO 31-Atmos Sci
HQ/R T WATSON

NAGW 2260 University of California - Irvine 2322
OBSERVATIONAL CONSTRAINTS AND EVOLUTIONARY MODELS FOR
THE STRUCTURE, PROPERTIES AND TIMESCALES
Period Obligations
05/22/1991-11/30/1993 FY94: \$0 TOTAL: \$59,904
Prin. Invest. NASA Tech. Officer CASE Category
S P RUDEN HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2487 University of California - Irvine 2323
HEAT: HIGH ENERGY ANTIMATTER TELESCOPE
Period Obligations
06/10/1991-12/31/1994 FY94: \$50,000 TOTAL: \$195,201
Prin. Invest. NASA Tech. Officer CASE Category
S W BARWICK HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 2655 University of California - Irvine 2324
LABORATORY SIMULATION OF MAGNETOSPHERIC FIELD ALIG NED
CURRENTS
Period Obligations
09/16/1991-05/31/1994 FY94: \$0 TOTAL: \$260,000
Prin. Invest. NASA Tech. Officer CASE Category
N ROSTOKER HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 2738 University of California - Irvine 2325
GROUND-BASED TRACE GAS MEASUREMENTS IN CONJUNCTION
WITH DC-8 TRACE-A MISSION
Period Obligations
09/25/1991-09/14/1994 FY94: \$0 TOTAL: \$299,138
Prin. Invest. NASA Tech. Officer CASE Category
F S ROWLAND HQ/A C JANETOS 39-Env Sci, NEC
HQ/R T WATSON

NAGW 2748 University of California - Irvine 2326
EFFECT OF LAND USE CHANGE ON THE CARBON CYCLE IN A
MAZON SOILS
Period Obligations
09/25/1991-08/31/1993 FY94: \$0 TOTAL: \$170,676
Prin. Invest. NASA Tech. Officer CASE Category
S TRUMBORE HQ/A C JANETOS 39-Env Sci, NEC
HQ/R T WATSON

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2791 University of California - Irvine 2327
MODELING OF THE MAGNETIZED LOWER TRANSITION REGION AND
TESTING OF ITS DIFFERENTIAL EMISSION MEASURE
Period Obligations
12/07/1991-10/31/1992 FY94: TOTAL: \$49,738
Prin. Invest. NASA Tech. Officer CASE Category
G VAN HOVEN HQ/W J WAGNER 13-Physics
HQ/K LANG

NAGW 3053 University of California - Irvine 2328
NAGW-3053/UNIV CA IRVINE/PROCESSES CONTROLLING
METHANE AND OTHER TRACE GAS FLUXES FROM TUNDRA
Period Obligations
04/17/1992-06/30/1994 FY94: \$0 TOTAL: \$153,000
Prin. Invest. NASA Tech. Officer CASE Category
W S REEBURGH HQ/A C JANETOS 39-Env Sci, NEC
HQ/D E WICKLAND

NAGW 3163 University of California - Irvine 2329
NAGW-3163/UNIV CA IRVINE/3-D MODELING OF TROPOSPHERIC
AND STRATOSPHERIC CHEMISTRY
Period Obligations
08/14/1992-04/30/1994 FY94: \$17,358 TOTAL: \$204,352
Prin. Invest. NASA Tech. Officer CASE Category
M J PRATHER HQ/J A KAYE 31-Atmos Sci
HQ/R E MURPHY

NAS 1-19155 University of California - Irvine 2330
HALOE SCIENTIFIC INVESTIGATIONS
Period Obligations
05/01/1990-09/30/1994 FY94: \$58,000 TOTAL: \$350,000
Prin. Invest. NASA Tech. Officer CASE Category
R CICERONE LARC/L E MAULDRIN 19-Phys Sci, NEC
LARC/J M RUSSELL

NAS 3-27094 University of California - Irvine 2331
ENVIRONMENTAL TESTING OF MATERIALS
Period Obligations
02/22/1994-02/21/1996 FY94: \$351,442 TOTAL: \$351,442
Prin. Invest. NASA Tech. Officer CASE Category
G S SAMUELSON LERC/N S JACOBSON 49-Engr, NEC
J C EARTHMAN LERC/J L SMIALEK
E J LAVERNIAN

NCC 2-750 University of California - Irvine 2332
WHOLE-AIR SAMPLING FROM THE DC-8 AIRCRAFT DURING A
ASE-II
Period Obligations
02/26/1992-12/31/1993 FY94: \$25,000 TOTAL: \$320,000
Prin. Invest. NASA Tech. Officer CASE Category
F S ROWLAND ARC/E P CONDON 31-Atmos Sci
D R BLAKE ARC/B TOON

NGT 00-030-067 University of California - Irvine 2333
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/06/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
M B DECKER HQ/D M BUTLER 39-Env Sci, NEC
G L HUNT HQ/G S WILSON

NGT 00-030-161 University of California - Irvine 2334
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/24/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D W TOOHEY HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-163 University of California - Irvine 2335
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/24/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R J CICERONE HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-050-551 University of California - Irvine 2336
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/05/1990-06/30/1993 FY94: TOTAL: \$42,598
Prin. Invest. NASA Tech. Officer CASE Category
W E SCHMITENDORF HQ/F C OWENS 46-Mech Engr

NGT 00-050-932 University of California - Irvine 2337
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/17/1992-09/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
S P RUDEN ARC/M MOORE 13-Physics

NGT 00-070-352 University of California - Irvine 2338
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
09/02/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D RICHARDSON HQ/D K RUSSELL 22-Computer Science

NGT 00-090-071 University of California - Irvine 2339
GSRP/UMF
Period Obligations
09/24/1992-08/14/1994 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
F HERMES HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-173 University of California - Irvine 2340
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/25/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
F HERMES HQ/D K RUSSELL 99-Multi-Discip

NAG 1-833 University of California - Los Angeles 2341
OPTIMAL STRUCTURAL DESIGN AND COMPOSITE HELICOPTER
ROTOR BLADES WITH STRAIGHT AND SWEEP TIPS
Period Obligations
11/16/1987-10/15/1994 FY94: \$1 TOTAL: \$317,295
Prin. Invest. NASA Tech. Officer CASE Category
P P FRIEDMANN LARC/H M ADELMAN 41-Aero Engr
LARC/J I PRITCHARD

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 1-1068 University of California - Los Angeles 2342
ELECTROPHYSIOLOGICAL CORRELATES OF SYSTEM CONTROL
PERFORMANCE DURING TASK UNDERLOAD; MEASUREMENT

Period	Obligations	
11/08/1989-11/02/1994	FY94: \$96,367	TOTAL: \$516,134
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M B STERMAN	LARC/R COMSTOCK	69-Psych, NEC

NAG 1-1126 University of California - Los Angeles 2343
INVESTIGATION OF HIGH ALTITUDE AIRCRAFT PLUMES AND
CORTAILS: PHYSICAL AND CHEMICAL PROCESSES

Period	Obligations	
04/16/1990-09/30/1994	FY94: \$101,000	TOTAL: \$439,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B V SANKAR	LERC/L R POOLE	31-Atmos Sci

NAG 1-1256 University of California - Los Angeles 2344
OPTIMIZATION ROBUST GUIDANCE OF HYPERSONIC CRUISE
VEHICLES - FDP

Period	Obligations	
05/30/1991-10/31/1994	FY94: \$0	TOTAL: \$132,816
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L SPEYER	LARC/D D MOERDER	42-Astro Engr
	LARC/W T SUIT	

NAG 1-1349 University of California - Los Angeles 2345
NEW DIRECTIONS IN TARGET AND ANTENNA RCA STUDIES

Period	Obligations	
09/23/1991-09/30/1992	FY94:	TOTAL: \$125,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N G ALEXOPOULOS	LARC/M C GILREATH	45-Elec Engr

NAG 1-1428 University of California - Los Angeles 2346
PROBLEMS WITH DIFFERENT TIME SCALES

Period	Obligations	
04/07/1992-09/30/1994	FY94: \$0	TOTAL: \$80,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H O KREISS	LARC/T B GATSKI	41-Aero Engr

NAG 2-450 University of California - Los Angeles 2347
VALIDATION OF MUSCLE VOLUME DETERMINATIONS BY MAGNETIC
RESONANCE IMAGING

Period	Obligations	
04/01/1987-05/31/1994	FY94: \$15,000	TOTAL: \$826,867
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V R EDGERTON	ARC/R E GRINDELAND	56-Medical Sciences
T P MARTIN		
J A HODGSON		

NAG 2-477 University of California - Los Angeles 2348
A STUDY OF AEROMECHANICAL PROBLEMS WITH ACTIVE CON

Period	Obligations	
08/01/1987-09/30/1994	FY94: \$20,000	TOTAL: \$286,141
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P FRIEDMANN	ARC/S A JACKLIN	41-Aero Engr

NAG 2-485 University of California - Los Angeles 2349
DATA ANALYSIS FOR THE PIONEER VENUS ELECTRIC
FIELDDETECTOR

Period	Obligations	
10/01/1987-01/31/1994	FY94: \$0	TOTAL: \$1,157,545
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J STRANGEWAY	ARC/R O FIMMEL	11-Astronomy
	ARC/R A CRAIG	

NAG 2-501 University of California - Los Angeles 2350
ANALYSIS OF MAGNETIC FIELD DATA FROM THE PIONEER VENUS
ORBITER

Period	Obligations	
10/01/1987-09/30/1993	FY94: \$0	TOTAL: \$2,292,052
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C RUSSELL	ARC/L E LASHER	11-Astronomy
	ARC/R O FIMMEL	

NAG 2-717 University of California - Los Angeles 2351
FRENCH RHESUS PROJECT

Period	Obligations	
06/21/1991-06/30/1995	FY94: \$359,958	TOTAL: \$994,270
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V R EDGERTON	ARC/C M WINGET	51-Biological Sci
R R ROY		
J A HODGSON		

NAG 2-799 University of California - Los Angeles 2352
INFRARED POLARIZATION STUDY OF THE GALACTIC CENTER ARC

Period	Obligations	
08/27/1992-09/30/1994	FY94: \$0	TOTAL: \$28,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M R MORRIS	ARC/C D LAUGHLIN	11-Astronomy
	ARC/C M GILLESPIE	

NAG 2-805 University of California - Los Angeles 2353
CROSS CALIBRATION OF AN FSSP AND WIRE IMPACTOR IN A
FAST-FLOW SYSTEM

Period	Obligations	
10/13/1992-11/30/1993	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J K LEW	ARC/R F PUESCHEL	31-Atmos Sci
	ARC/K G SNETSINGER	

NAG 2-822 University of California - Los Angeles 2354
MULTIOBJECTIVE OPTIMIZATION OF HYBRID REGENERATIVE LIFE
SUPPORT TECHNOLOGIES

Period	Obligations	
12/18/1992-10/31/1994	FY94: \$75,919	TOTAL: \$149,627
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V MANOUSIOUTHAKIS	ARC/J W FISCHER	56-Medical Sciences
	ARC/E C DUNSKY	

NAG 2-835 University of California - Los Angeles 2355
PROPOSAL FOR FUNDAMENTAL VALIDATION STUDIES AND
EXPANSION OF THE CAPABILITIES OF THE 2GHAS COMPUTE

Period	Obligations	
05/20/1993-01/31/1995	FY94: \$0	TOTAL: \$24,932
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P P FRIEDMAN	ARC/M J RUTKOWSKI	41-Aero Engr

NAG 3-451 University of California - Los Angeles 2356
THIN FILM TEMPERATURE SENSORS

Period	Obligations	
07/05/1983-01/11/1995	FY94: \$80,000	TOTAL: \$942,038
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R F BUNSHAH	LERC/R HOLANDA	47-Materials Engr
	LERC/W D WILLIAMS	

NAG 3-1290 University of California - Los Angeles 2357
HIGH TEMPERATURE LITHIUM ION CONDUCTING SOLIDS

Period	Obligations	
06/27/1991-09/14/1993	FY94:	TOTAL: \$79,624
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B S DUNN	LERC/N H HAGEDORN	12-Chemistry

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NAG 3-1325 University of California - Los Angeles 2358
EVALUATION OF THE EFFECT OF MICROALLOYING ON CLEAVAGE OF MONOCRYSTAL NIA1 USING A MINI DISK-BEND TEST
Period *Obligations*
02/07/1992-03/06/1995 FY94: \$25,000 TOTAL: \$125,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A J ARDELL LERC/R D NORBE 47-Materials Engr
LERC/M V NATHAL

NAG 5-789 University of California - Los Angeles 2366
NUMERICAL MODELING OF THE GLOBAL ATMOSPHERE
Period *Obligations*
06/01/1986-10/31/1993 FY94: \$0 TOTAL: \$693,890
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A ARAKAWA GSFC/M SUAREZ 31-Atmos Sci

NAG 3-1419 University of California - Los Angeles 2359
MICROGRAVITY FOAM STRUCTURE AND RHEOLOGY
Period *Obligations*
12/15/1992-02/14/1995 FY94: \$50,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D DURIAN LERC/J GLASGOW 47-Materials Engr
LERC/R ANSARI

NAG 5-863 University of California - Los Angeles 2367
DATA ANALYSIS OF THE CHARGED COMPOSITION EXPLORER PLASMA WAVES EXPERIMENT
Period *Obligations*
11/15/1986-04/14/1994 FY94: \$0 TOTAL: \$353,598
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J STRONGWAY GSFC/S A CURTIS 13-Physics
GSFC/M H ACUNA

NAG 3-1456 University of California - Los Angeles 2360
STABILIZATION OF THERMOCAPILLARY CONVECTION BY MEANS OF NONPLANAR FLOW OSCILLATIONS
Period *Obligations*
02/22/1993-03/27/1995 FY94: \$80,000 TOTAL: \$160,020
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E KELLY LERC/R L THOMPSON 46-Mech Engr

NAG 5-1040 University of California - Los Angeles 2368
ST
Period *Obligations*
03/15/1988-12/31/1992 FY94: \$0 TOTAL: \$253,399
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W KAULA GSFC/J E WELKER 32-Geological Sci

NAG 3-1503 University of California - Los Angeles 2361
MAGNETOSPHERIC MAPPING SAMPLING STUDY
Period *Obligations*
06/24/1993-09/15/1993 FY94: \$0 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C T RUSSELL LERC/J M HICKMAN 13-Physics

NAG 5-1100 University of California - Los Angeles 2369
THEORETICAL TECHNOLOGY RESEARCH FOR THE ISTP
Period *Obligations*
11/01/1988-10/31/1994 FY94: \$455,200 TOTAL: \$2,178,105
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A ABDALLA GSFC/S A CURTIS 13-Physics
GSFC/M H ACUNA

NAG 3-1584 University of California - Los Angeles 2362
SCIENCE PLANNING FOR THE TROPIX MISSION
Period *Obligations*
03/25/1994-03/24/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C T RUSSELL LERC/J M HICKMAN 19-Phys Sci, NEC

NAG 5-1166 University of California - Los Angeles 2370
CALIBRATION OF MAGNETICALLY INDUCED SOLAR VELOCITY
Period *Obligations*
07/15/1989-01/31/1995 FY94: \$30,000 TOTAL: \$394,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K ULRICH GSFC/A I POLAND 11-Astronomy

NAG 3-1646 University of California - Los Angeles 2363
SCIENCE PLANNING FOR SOLAR ELECTRIC PLANETARY MISSIONS
Period *Obligations*
07/08/1994-07/07/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C T RUSSELL LERC/J M HICKMAN 19-Phys Sci, NEC

NAG 5-1167 University of California - Los Angeles 2371
PARTICIPATION IN CLUSTER MAGNETOMETER CONSORTIUM
Period *Obligations*
07/15/1989-07/14/1995 FY94: \$99,000 TOTAL: \$483,054
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M G KIVELSON GSFC/M ACUNA 13-Physics

NAG 5-488 University of California - Los Angeles 2364
A THEORETICAL INVESTIGATION OF AURORAL DYNAMICS
Period *Obligations*
03/01/1985-02/28/1993 FY94: \$0 TOTAL: \$520,847
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E MAGGS GSFC/G D BULLOCK 19-Phys Sci, NEC
GSFC/R A HOFFMAN

NAG 5-1309 University of California - Los Angeles 2372
COBE DATA ANALYSIS AND ATTITUDE VALIDATION
Period *Obligations*
11/15/1989-12/31/1994 FY94: \$121,000 TOTAL: \$568,742
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E L WRIGHT GSFC/J MATHER 11-Astronomy

NAG 5-713 University of California - Los Angeles 2365
ESTIMATION THEORY SATELLITE DATA ASSIMILATION AND ATMOSPHERIC PREDICTABILITY
Period *Obligations*
09/15/1985-04/30/1995 FY94: \$100,000 TOTAL: \$1,003,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M GHIL GSFC/J PFAENDTNER 31-Atmos Sci

NAG 5-1358 University of California - Los Angeles 2373
GROUND AND SPACE-BASED MULTIWAVELENGTH OBSERVATIONS
Period *Obligations*
04/11/1990-05/31/1993 FY94: \$0 TOTAL: \$147,800
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A MALKAN GSFC/D WEST 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 5-1440 University of California - Los Angeles 2374
EMBEDDED SYSTEMS SOFTWARE ASSESSMENT/ENHANCEMENT
Period Obligations
08/20/1990-09/14/1993 FY94: \$0 TOTAL: \$210,000
Prin. Invest. NASA Tech. Officer CASE Category
G APOSTOLAKIS GSFC/L E HYATT 22-Computer Science
S B GUARRO

NAG 5-1480 University of California - Los Angeles 2375
MAGNETOSPHERIC MHD AND KINETIC PROCESSES
Period Obligations
11/19/1990-04/30/1994 FY94: \$0 TOTAL: \$775,000
Prin. Invest. NASA Tech. Officer CASE Category
M ASHOUR-ABDALLA GSFC/T J BIRMINGHAM 13-Physics

NAG 5-1529 University of California - Los Angeles 2376
STUDIES OF THE LOBES OF THE MAGNETOTAIL USING ISEE ,
AMPTE, AND IMP DATA
Period Obligations
04/08/1991-04/14/1994 FY94: \$0 TOTAL: \$158,529
Prin. Invest. NASA Tech. Officer CASE Category
M G KIVELSON GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-1530 University of California - Los Angeles 2377
STUDIES OF FLOWS IN MAGNETOTAIL
Period Obligations
04/08/1991-04/14/1994 FY94: \$0 TOTAL: \$133,034
Prin. Invest. NASA Tech. Officer CASE Category
R J WALKER GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-1719 University of California - Los Angeles 2378
PSPC SPECTRA OF X-RAY LUMINOUS 'NORMAL' GALAXIES
Period Obligations
08/13/1991-11/30/1994 FY94: \$30,000 TOTAL: \$107,000
Prin. Invest. NASA Tech. Officer CASE Category
M A MALKAN GSFC/R PETRE 11-Astronomy

NAG 5-1799 University of California - Los Angeles 2379
AN INTENSIVE STUDY OF THE VARIABLE PLANETARY NEBULAE
Period Obligations
10/30/1991-03/31/1995 FY94: \$12,730 TOTAL: \$37,000
Prin. Invest. NASA Tech. Officer CASE Category
L H ALLER GSFC/D WEST 11-Astronomy

NAG 5-1845 University of California - Los Angeles 2380
VOLCANIC CLOUD DISPERSION CHEMISTRY AND MICROPHYSICS:
AN ANALYSIS OF THE E1 CHICHON ERUPTION
Period Obligations
12/12/1991-02/28/1995 FY94: \$54,000 TOTAL: \$125,880
Prin. Invest. NASA Tech. Officer CASE Category
R P TURCO GSFC/L S WALTER 32-Geological Sci

NAG 5-1967 University of California - Los Angeles 2381
MAGNETOMETER DATA PRESERVATIONS AND MAGNETIC RECORD
MICROFICHE
Period Obligations
05/06/1992-06/14/1994 FY94: \$30,000 TOTAL: \$221,000
Prin. Invest. NASA Tech. Officer CASE Category
C RUSSELL GSFC/G BULLOCK 19-Phys Sci, NEC

NAG 5-2140 University of California - Los Angeles 2382
ULTRAVIOLET SPECTRA OF THE COMPLETE 12-MICRON SEYFERT
1 GALAXY SAMPLE
Period Obligations
11/23/1992-03/31/1995 FY94: \$12,060 TOTAL: \$18,000
Prin. Invest. NASA Tech. Officer CASE Category
M A MALKAN GSFC/D WEST 11-Astronomy

NAG 5-2178 University of California - Los Angeles 2383
STUDIES OF THE INTERSTELLAR MEDIUM WITH THE GHRS
Period Obligations
01/11/1993-01/14/1995 FY94: \$54,200 TOTAL: \$105,600
Prin. Invest. NASA Tech. Officer CASE Category
M A JURA GSFC/A SMITH 11-Astronomy

NAG 5-2224 University of California - Los Angeles 2384
DEVELOPMENT OF AN EARTH SYSTEM MODEL: ATMOSPHERE/
OCEAN DYNAMICS AND TRACERS CHEMISTRY
Period Obligations
02/25/1993-11/30/1994 FY94: \$610,000 TOTAL: \$935,000
Prin. Invest. NASA Tech. Officer CASE Category
C R MECHOSO GSFC/J R FISCHER 31-Atmos Sci
A ARAKAWA
R P TURCO

NAG 5-2225 University of California - Los Angeles 2385
DATA ANALYSIS AND KNOWLEDGE DISCOVERY IN GEOPHYSICAL
DATABASES
Period Obligations
03/01/1993-11/30/1994 FY94: \$255,000 TOTAL: \$431,000
Prin. Invest. NASA Tech. Officer CASE Category
R MUNTZ GSFC/J R FISCHER 22-Computer Science

NAG 5-2417 University of California - Los Angeles 2386
DETECTING NEW EXTRAGALACTIC HIGH-ENERGY GAMMA-RAY
SOURCES: NATURE OF THE 100 MEV EMISSION FROM...
Period Obligations
11/06/1993-11/14/1994 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
M A MALKIN GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2591 University of California - Los Angeles 2387
NUMERICAL MODELING OF THE GLOBAL ATMOSPHERE
Period Obligations
05/12/1994-05/14/1995 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
A ARAKAWA GSFC/M SUAREZ 31-Atmos Sci

NAG 5-2653 University of California - Los Angeles 2388
STELLAR AND CIRCUMSTELLAR STRUCTURES IN ALGOL BINARIES
Period Obligations
07/27/1994-07/31/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
M J PLAVEC GSFC/D WEST 11-Astronomy

NAG 8-247 University of California - Los Angeles 2389
JOVE
Period Obligations
09/15/1992-09/14/1993 FY94: \$0 TOTAL: \$23,033
Prin. Invest. NASA Tech. Officer CASE Category
R L MCPHERRON MSFC/F SIX 31-Atmos Sci

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAG 9-27 University of California - Los Angeles 2390
ISOTOPIC ANALYSIS OF LIGHT ELEMENTS
Period *Obligations*
02/01/1983-03/01/1994 FY94: \$0 TOTAL: \$496,012
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J F KERRIDGE JSC/I D BROWNE 12-Chemistry
I R KAPLAN

NAG 9-87 University of California - Los Angeles 2391
STUDY-PRISTINE LUNAR ROCKS + GENESIS
Period *Obligations*
02/01/1984-03/01/1994 FY94: \$0 TOTAL: \$855,539
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P H WARREN JSC/I D BROWNE 19-Phys Sci, NEC
G W KALLEMEYN

NAG 9-323 University of California - Los Angeles 2392
TENSION DEVELOPMENT MUSCULAR ATROPHY
Period *Obligations*
12/01/1988-04/01/1994 FY94: \$0 TOTAL: \$179,599
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C E KASPER JSC/C F SAMS 51-Biological Sci

NAGW 80 University of California - Los Angeles 2393
RESEARCH ON THEORETICAL STUDIES OF EXTRAGALACTIC GRAINS
Period *Obligations*
10/01/1980-09/30/1993 FY94: \$0 TOTAL: \$372,623
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A JURA HQ/F C GILLET 11-Astronomy
HQ/N W BOGESS

NAGW 87 University of California - Los Angeles 2394
STUDIES OF PLASMA ENVIRONMENT OF JUPITER AND SATURN
Period *Obligations*
07/01/1980-08/19/1994 FY94: \$0 TOTAL: \$640,933
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R M THORNE HQ/J T BERGSTRALH 31-Atmos Sci
HQ/W L QUAIDE

NAGW 347 University of California - Los Angeles 2395
ISOTOPIC CHARACTERIZATION OF PREBIOTIC SYNTHESIS OF ORGANIC MATTER
Period *Obligations*
07/01/1982-12/31/1992 FY94: \$0 TOTAL: \$615,152
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J F KERRIDGE HQ/J D RUMMEL 12-Chemistry
HQ/M SOUNER

NAGW 472 University of California - Los Angeles 2396
THEORETICAL STUDIES IN SUPPORT OF A SOLAR SEISMOLOGY MISSION
Period *Obligations*
06/01/1983-12/31/1996 FY94: \$208,000 TOTAL: \$1,616,174
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ULRICH HQ/J D BOHLIN 13-Physics
HQ/D S SPICER

NAGW 1021 University of California - Los Angeles 2397
GENERAL CIRCULATION OF THE SOUTHERN HEMISPHERE STRATOSPHERE
Period *Obligations*
05/01/1987-12/31/1994 FY94: \$120,000 TOTAL: \$721,803
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C R MECHOSO HQ/R D MCPETERS 31-Atmos Sci
HQ/M J PRATHER

NAGW 1347 University of California - Los Angeles 2398
AERONOMICAL PECULIARITIES OF THE UNMAGNETIZED PLANETS
Period *Obligations*
06/28/1988-11/30/1993 FY94: \$0 TOTAL: \$413,587
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J G LUHMANN HQ/J T BERGSTRALH 13-Physics
HQ/W L QUAIDE

NAGW 1570 University of California - Los Angeles 2399
LABORATORY MODELING OF MAGNETOSPHERIC PARTICLE ACCELERATIONS
Period *Obligations*
12/21/1988-02/28/1995 FY94: \$42,000 TOTAL: \$442,228
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R L STENZEL HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1624 University of California - Los Angeles 2400
SPACE PLASMA PHYSICS AT UCLA
Period *Obligations*
03/01/1989-02/28/1994 FY94: \$0 TOTAL: \$373,850
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C F KENNEL HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1635 University of California - Los Angeles 2401
ELECTRON DYNAMICS IN THE AURORAL PLASMA
Period *Obligations*
02/24/1989-12/31/1992 FY94: \$0 TOTAL: \$256,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E MAGGS HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1874 University of California - Los Angeles 2402
DYNAMICAL STUDIES OF THE ATMOSPHERES OF VENUS, JUPITER, URANUS AND IO
Period *Obligations*
01/03/1990-10/31/1994 FY94: \$83,000 TOTAL: \$349,339
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G SCHUBERT HQ/J BERGSTRALH 11-Astronomy

NAGW 2047 University of California - Los Angeles 2403
AN INVESTIGATION OF THE STRUCTURE AND MOTION OF THE JOVIAN MAGNETOSPHERE
Period *Obligations*
05/05/1990-03/31/1996 FY94: \$36,750 TOTAL: \$161,108
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K K KHURANA HQ/M M MELLOTT 13-Physics
HQ/T PERRY

NAGW 2054 University of California - Los Angeles 2404
SUBSTORM DYNAMICS IN THE NEAR-EARTH MAGNETOSPHERE
Period *Obligations*
05/05/1990-03/31/1995 FY94: \$60,000 TOTAL: \$266,726
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R MCPHERRON HQ/M M MELLOTT 13-Physics
HQ/T PERRY

NAGW 2063 University of California - Los Angeles 2405
MARS POLAR SURFACE AND SUBSURFACE PROPERTIES
Period *Obligations*
04/10/1990-09/30/1994 FY94: \$42,999 TOTAL: \$160,998
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A PAIGE HQ/J M BOYCE 32-Geological Sci

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAGW 2067 University of California - Los Angeles 2406
NAGW-2067/UNIV OF CALIF/DETERMINATION OF THE SOURCE MECHANISMS FOR ULF WAVES USING A CLOSELY SPACED

Period	Obligations	
04/19/1990-03/31/1993	FY94: \$0	TOTAL: \$138,114
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C T RUSSELL	HQ/M M MELLOTT	13-Physics
	HQ/T PERRY	

NAGW 2085 University of California - Los Angeles 2407
DYNAMICS OF THE ORIGIN OF THE SOLAR SYSTEM

Period	Obligations	
07/23/1990-10/31/1994	FY94: \$42,801	TOTAL: \$196,601
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W H KAULA	HQ/T A MAXWELL	32-Geological Sci

NAGW 2086 University of California - Los Angeles 2408
THERMAL AND DYNAMICAL PROCESSES IN THE EVOLUTION OF PLANETS AND SATELLITES

Period	Obligations	
05/14/1990-09/30/1994	FY94: \$49,394	TOTAL: \$205,048
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G SCHUBERT	HQ/T A MAXWELL	32-Geological Sci

NAGW 2147 University of California - Los Angeles 2409
NAGW-2147/UNIV OF CALIF LOS ANGELES/PALEOBIOLGIC STUDIES OF THE ANTIQUITY AND PRECAMBIAN EVOLUTION

Period	Obligations	
07/13/1990-12/31/1994	FY94: \$60,000	TOTAL: \$362,007
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J W SCHOPF	HQ/J D RUMNEL	32-Geological Sci
	HQ/S W FOGLEMAN	

NAGW 2183 University of California - Los Angeles 2410
NAGW-2182/UNIV OF CALIF LOS ANGELES/INVESTIGATION OF THE PHYSICS AND PHYSICAL CHEMISTRY OF POLAR STRAT

Period	Obligations	
07/12/1990-12/31/1994	FY94: \$0	TOTAL: \$364,400
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R P TURCO	HQ/R D MCPETERS	13-Physics
	HQ/M J PRATHER	

NAGW 2226 University of California - Los Angeles 2411
UNUSUAL PROPERTIES OF MARTIAN SEASONAL FROST DEPOSITS

Period	Obligations	
02/27/1991-10/31/1993	FY94: \$0	TOTAL: \$120,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D A PAIGE	HQ/T A MAXWELL	32-Geological Sci

NAGW 2243 University of California - Los Angeles 2412
NAGW-2243/UNIV CALIF LOS ANGELES/METEORITIC CLUSES REGARDING NEBULAR AND ASTEROIDAL TEMPERATURES

Period	Obligations	
06/13/1991-10/31/1994	FY94: \$15,000	TOTAL: \$135,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J T WASSON	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 2269 University of California - Los Angeles 2413
FRAGMENTATION IN STLLAR COLLAPSE

Period	Obligations	
05/21/1991-10/31/1995	FY94: \$30,000	TOTAL: \$164,998
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W M KAULA	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 2270 University of California - Los Angeles 2414
A SEARCH FOR BROWN DWARFS AND HIGH MASS PLANETS

Period	Obligations	
12/07/1990-10/31/1994	FY94: \$48,600	TOTAL: \$183,600
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B M ZUCKERMAN	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 2295 University of California - Los Angeles 2415
AN INVESTIGATION OF SOLAR WIND EFFECTS ON THE EVOL UTION OF THE MARTIAN ATMOSPHERE

Period	Obligations	
03/06/1991-05/31/1994	FY94: \$0	TOTAL: \$90,100
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J LUHMANN	HQ/W L QUAIDE	32-Geological Sci

NAGW 2384 University of California - Los Angeles 2416
MARS 94 SEISMOLOGY PARTICIPATION

Period	Obligations	
06/17/1991-07/31/1995	FY94: \$24,999	TOTAL: \$100,599
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P M DAVIS	HQ/W QUAIDE	19-Phys Sci, NEC

NAGW 2397 University of California - Los Angeles 2417
THE ANALYSIS AND INTERPRETATION OF VOYAGER PLASMA WAVE DATA: VOYAGER NEPTUNE DATA ANALYSIS PROGRAM

Period	Obligations	
03/01/1991-12/31/1993	FY94: \$0	TOTAL: \$105,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D D BARBOSA	HQ/W L QUAIDE	19-Phys Sci, NEC

NAGW 2409 University of California - Los Angeles 2418
NEPTUNE MAGNETOSPHERE DATA ANALYSIS

Period	Obligations	
06/24/1991-12/31/1993	FY94: \$0	TOTAL: \$247,700
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G L SISCOE	HQ/W L QUAIDE	19-Phys Sci, NEC

NAGW 2546 University of California - Los Angeles 2419
THEORY OF GEODYNAMO AND SECULAR VARIATION

Period	Obligations	
08/20/1991-05/31/1994	FY94: \$0	TOTAL: \$209,865
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P ROBERTS	HQ/A J ANDERSON	32-Geological Sci
	HQ/R E MURPHY	

NAGW 2573 University of California - Los Angeles 2420
CO-INVESTIGATOR PARTICIPATION IN THE MARS '94 MISSION: STUDIES OF THE MARTIAN MAGNETIC FIELD

Period	Obligations	
08/22/1991-01/31/1995	FY94: \$46,000	TOTAL: \$157,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C T RUSSELL	HQ/W L QUAIDE	19-Phys Sci, NEC

NAGW 2575 University of California - Los Angeles 2421
CO-INVESTIGATOR PARTICIPATION IN THE MARS '94 MISSION STUDIES: TOPSIDE SOUNDER AND MAGNETOMETER

Period	Obligations	
08/02/1991-01/31/1995	FY94: \$22,800	TOTAL: \$70,126
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J LUHMANN	HQ/W L QUAIDE	19-Phys Sci, NEC

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2620 University of California - Los Angeles 2422
DISRUPTION OF TAIL CURRENT BY KINETIC DRIFT-BALLOONING
MODES AT SUBSTORM BREAK-UP

Period	Obligations	
08/02/1991-05/31/1994	FY94: \$0	TOTAL: \$167,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R PELLAT	HQ/M M MELLOTT	13-Physics
	HQ/J D BOHLIN	

NAGW 2646 University of California - Los Angeles 2423
NAGW-2646/UNIV CA/THREE-DIMENSIONAL NUMERICAL SIMU-
LATIONS OF LITHOSPHERE AND MANTLE DYNAMICS

Period	Obligations	
08/19/1991-06/30/1994	FY94: \$0	TOTAL: \$256,986
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G SCHUBERT	HQ/M M BALTUCK	32-Geological Sci
	HQ/B J MALCOLM	

NAGW 2842 University of California - Los Angeles 2424
CONTAINERLESS CAPILLARY WAVE TURBULENCE

Period	Obligations	
01/17/1992-11/30/1994	FY94: \$85,000	TOTAL: \$255,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S J PUTTERMAN	HQ/B M CARPENTER	13-Physics
M BARMATZ		

NAGW 2848 University of California - Los Angeles 2425
MHD STUDIES OF THE MAGNETOSHEATH AND THE MAGNETOPAU-
SE

Period	Obligations	
01/24/1992-03/31/1995	FY94: \$68,500	TOTAL: \$198,500
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C C WU	HQ/M M MELLOTT	13-Physics
	HQ/J D BOHLIN	

NAGW 2853 University of California - Los Angeles 2426
THEORETICAL MODELING OF THE RESPONSE OF THE THERMO-
SPHERE TO GEOMAGNETIC PROCESSES

Period	Obligations	
03/13/1992-04/30/1994	FY94: \$79,000	TOTAL: \$154,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R P TURCO	HQ/D L REASONER	13-Physics
	HQ/J D BOHLIN	

NAGW 2886 University of California - Los Angeles 2427
STUDY OF THE INTERACTION OF THE SOLAR WIND WITH NEU-
TUNE

Period	Obligations	
02/20/1992-09/30/1994	FY94: \$0	TOTAL: \$112,352
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C T RUSSELL	HQ/W L QUAIDE	19-Phys Sci, NEC

NAGW 2997 University of California - Los Angeles 2428
FINITE ELEMENT MODELING OF ANDEAN TECTONICS

Period	Obligations	
03/17/1992-12/31/1994	FY94: \$0	TOTAL: \$124,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W M KAULA	HQ/R E MURPHY	32-Geological Sci
	HQ/D M BUTLER	

NAGW 3042 University of California - Los Angeles 2429
NAGW-3042/UNIV CA/LOS ANGELES/GLOBAL DYNAMIC MOD-
ELING OF SPACE-GEODETIC DATA

Period	Obligations	
04/16/1992-12/31/1994	FY94: \$64,368	TOTAL: \$183,338
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P BIRD	HQ/R E MURPHY	32-Geological Sci
	HQ/D M BUTLER	

NAGW 3064 University of California - Los Angeles 2430
NAGW-3064/UNIV CA/LOS ANGELES/ISOTOPIC TRACERS OF
INTERSTELLAR CHEMISTRY IN METEORITIC ORGANIC

Period	Obligations	
05/04/1992-05/31/1995	FY94: \$28,630	TOTAL: \$85,890
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J F KERRIDGE	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 3096 University of California - Los Angeles 2431
NAGW-3096/UNIV CA/THE UCLA INTERNATIONAL CONFERENCE
ON GAMMA RAY AND NEUTRINO COSMOLOGY

Period	Obligations	
06/16/1992-03/31/1994	FY94: \$0	TOTAL: \$3,500
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D B CLINE	HQ/R V STACHNIK	11-Astronomy
	HQ/E J WEILER	

NAGW 3115 University of California - Los Angeles 2432
NAGW-3115/UNIV CA/ISO KEY PROJECT: DUST DEBRIS AROUND
SOLAR MASS STARS

Period	Obligations	
07/27/1992-09/30/1994	FY94: \$0	TOTAL: \$139,819
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E E BECKLIN	HQ/L J CAROFF	11-Astronomy

NAGW 3132 University of California - Los Angeles 2433
DYNAMICS OF OUTER SOLAR SYSTEM ORIGIN AND EVOLUTION

Period	Obligations	
07/14/1992-05/31/1994	FY94: \$0	TOTAL: \$100,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
NEWMAN	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 3190 University of California - Los Angeles 2434
PLASMA PHYSICS OF PLANETARY MAGNETOSPHERES

Period	Obligations	
08/28/1992-12/31/1994	FY94: \$72,412	TOTAL: \$177,412
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D D BARBOSA	HQ/E C WHIPPLE	13-Physics
	HQ/J D BOHLIN	

NAGW 3300 University of California - Los Angeles 2435
INTERNATIONAL CONFERENCE ON INFRARED ASTRONOMY WITH
ARRAYS THE NEXT GENERATION

Period	Obligations	
12/31/1992-12/31/1993	FY94: \$0	TOTAL: \$9,544
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
I S MCLEAN	HQ/L J CAROFF	11-Astronomy

NAGW 3308 University of California - Los Angeles 2436
NAGW-3308/UCLA/PRISTINE IGNEOUS ROCKS AND THE GENESIS
OF EARLY PLANETARY CRUSTS

Period	Obligations	
12/22/1992-12/14/1994	FY94: \$125,685	TOTAL: \$245,385
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P H WARREN	HQ/H C BRINTON	32-Geological Sci

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAGW 3349 University of California - Los Angeles 2437
ISOTOPIC ANALYSIS OF LIGHT ELEMENTS
Period *Obligations*
01/13/1993-11/30/1994 FY94: \$0 TOTAL: \$41,200
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J F KERRIDGE HQ/H C BRINTON 13-Physics

NAGW 3426 University of California - Los Angeles 2438
ASSESSMENT OF ION SCAVENGING PROCESSES AT VENUS AND THEIR EVOLUTIONARY SIGNIFICANCE
Period *Obligations*
02/24/1993-06/30/1996 FY94: \$33,100 TOTAL: \$79,418
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J G LUHMAN HQ/J T BERGSTRALH 31-Atmos Sci

NAGW 3468 University of California - Los Angeles 2439
DEFINITION AND DEVELOPMENT OF A PROTOTYPE MARS SEISMIC STATION
Period *Obligations*
04/09/1993-06/31/1995 FY94: \$100,000 TOTAL: \$200,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
P M DAVIS HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3476 University of California - Los Angeles 2440
OBL. WAV. IN HOT MAG. PLAS. MOD. BY A GEN. LOR. (K APPA)DIS.
Period *Obligations*
03/27/1993-05/31/1996 FY94: \$73,500 TOTAL: \$143,500
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R M THORNE HQ/E C WHIPPLE 13-Physics
HQ/G L WITHBROE

NAGW 3477 University of California - Los Angeles 2441
STRUCTURE AND DISSIPATION IN COLLISIONLESS SHOCKS
Period *Obligations*
03/29/1993-01/31/1996 FY94: \$70,350 TOTAL: \$137,350
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
C T RUSSELL HQ/F C WHIPPLE 13-Physics
HQ/G L WITHBROE

NAGW 3484 University of California - Los Angeles 2442
COLDSPOTS AND HOTSPOTS QUANTITATIVE INVESTIGATIONS OF VENUS TECTONICS
Period *Obligations*
03/27/1993-03/14/1995 FY94: \$37,400 TOTAL: \$89,400
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D L BINDSCHADLER HQ/J T BERGSTRALH 32-Geological Sci

NAGW 3492 University of California - Los Angeles 2443
AN INVS. OF THE INDUCED MAG. OF VENUS AND ITS INTER. WITH THE SOLAR WIND
Period *Obligations*
03/27/1992-03/14/1995 FY94: \$57,600 TOTAL: \$87,600
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
C T RUSSELL HQ/J T BERGSTRALH 31-Atmos Sci

NAGW 3497 University of California - Los Angeles 2444
PLASMA WAVES IN THE MAGNETOSHEATH OF VENUS
Period *Obligations*
04/06/1993-03/14/1995 FY94: \$54,000 TOTAL: \$84,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R J STRANGEWAY HQ/J T BERGSTRALH 31-Atmos Sci

NAGW 3535 University of California - Los Angeles 2445
DIFFERENTIATED METEORITES AND THE COMPONENTS OF CHONDRITES
Period *Obligations*
04/22/1993-01/31/1995 FY94: \$168,302 TOTAL: \$351,462
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J WASSON HQ/J BOYCE 32-Geological Sci

NAGW 3546 University of California - Los Angeles 2446
VENUS: DYNAMICS OF ITS INTERIOR, SURFACE AND LOWER ATMOSPHERE
Period *Obligations*
04/22/1993-03/31/1995 FY94: \$54,000 TOTAL: \$129,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
G SCHUBERT HQ/J T BERGSTRALH 32-Geological Sci

NAGW 3590 University of California - Los Angeles 2447
ASYMMETRIC AURORAL PROCESSES ON THE GIANT PLANETS
Period *Obligations*
05/20/1993-03/31/1996 FY94: \$52,600 TOTAL: \$102,600
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R THORNE HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3661 University of California - Los Angeles 2448
SOME STUDIES OF THE MACRO AND MICRO STRUCTURE OF THE VENUSIAN BOW SHOCK AND THE IONOSPHERE
Period *Obligations*
06/16/1993-05/31/1995 FY94: \$43,200 TOTAL: \$103,200
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
K K KHURANA HQ/J T BERGSTRALH 31-Atmos Sci

NAGW 3671 University of California - Los Angeles 2449
STRATOSPHERIC HETEROGENEOUS CHEMISTRY AND MICROPHYSICS: MODEL, DEVELOPMENT, VALIDATION AND APPLICATIONS
Period *Obligations*
06/30/1993-06/30/1996 FY94: \$112,500 TOTAL: \$222,500
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R TURCO HQ/J A KAYE 31-Atmos Sci

NAGW 3725 University of California - Los Angeles 2450
DEVELOPMENT OF A MARS EXOBIOLOGY EXPLORATION STRATEGY
Period *Obligations*
08/26/1993-06/30/1995 FY94: \$38,599 TOTAL: \$70,630
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J F KERRIDGE HQ/J D RUMMEL 39-Env Sci, NEC

NAGW 3829 University of California - Los Angeles 2451
NAGW-3829/UCLA/PRESENT TECTONIC RATE IN ASIA
Period *Obligations*
12/09/1993-10/31/1994 FY94: \$12,211 TOTAL: \$12,211
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J VILLASENOR HQ/M BALTUCK 32-Geological Sci

NAGW 3857 University of California - Los Angeles 2452
UCLA: MARS POLAR PATHFINDER ADVANCED MISSION STUDY
Period *Obligations*
01/31/1994-05/31/1994 FY94: \$90,000 TOTAL: \$90,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D PAIGE HQ/M KICZA 31-Atmos Sci

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAGW 3915 University of California - Los Angeles 2453
 INTEGRATING DATA ANALYSIS VISUALIZATION AND DATA MGM T
 IN A HETEROGENEOUS DISTRIBUTED ENVIRONMENT

Period	Obligations	
04/11/1994-01/31/1995	FY94: \$125,000	TOTAL: \$125,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R R MUNTZ	HQ/G H MUCKLOW	22-Computer Science
	HQ/J H BREDECAMP	

NAGW 3948 University of California - Los Angeles 2454
 A STUDY OF FLOWS AND BOUNDARY LAYERS IN THE MAGNET
 OSHEATH AND OUTER MAGNETOSPHERE

Period	Obligations	
04/20/1994-03/31/1997	FY94: \$25,000	TOTAL: \$25,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C T RUSSELL	HQ/E C WHIPPLE	13-Physics
	HQ/J D BOHLIN	

NAGW 3955 University of California - Los Angeles 2455
 GLOBAL MAGNETOSPHERIC ION DYNAMICS

Period	Obligations	
04/21/1994-01/31/1995	FY94: \$25,000	TOTAL: \$25,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R RICHARD	HQ/E C WHIPPLE	13-Physics
	HQ/J D BOHLIN	

NAGW 3974 University of California - Los Angeles 2456
 A STUDY OF CURRENTS IN THE MIDDLE AND OUTER MAGNET
 OSPHERE

Period	Obligations	
05/10/1994-04/30/1997	FY94: \$50,000	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C T RUSSELL	HQ/E C WHIPPLE	13-Physics
	HQ/J D BOHLIN	

NAGW 3993 University of California - Los Angeles 2457
 AN INTERNATIONAL SYMPOSIUM ON A CRITIQUE OF THE SO URCES
 OF DARK MATTER IN THE UNIVERSE

Period	Obligations	
05/23/1994-02/14/1995	FY94: \$9,646	TOTAL: \$9,646
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D B CLINE	HQ/J CAROFF	11-Astronomy

NAGW 4063 University of California - Los Angeles 2458
 SOLAR WIND EFFECTS ON ATMOSPHERES OF WEAKLY MAGNET
 IZED BODIES: MARS, TITAN AND THE MOON

Period	Obligations	
06/28/1994-04/30/1995	FY94: \$70,000	TOTAL: \$70,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J LUHMANN	HQ/J BERGSTRALH	31-Atmos Sci

NAGW 4112 University of California - Los Angeles 2459
 DEVELOPMENT OF HIGH RESOLUTION-HIGH SENSITIVITY ION
 MICROPROBE FACILITY FOR COSMOCHEMICAL

Period	Obligations	
08/17/1994-05/31/1995	FY94: \$79,999	TOTAL: \$79,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K D MCKEEGAN	HQ/P ROGERS	32-Geological Sci

NAGW 4115 University of California - Los Angeles 2460
 RECENT LIQUID WATER ON MARS

Period	Obligations	
08/16/1994-03/31/1995	FY94: \$50,000	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D A PAIGE	HQ/M MEYER	31-Atmos Sci

NAGW 4130 University of California - Los Angeles 2461
 RELATIONSHIP OF BURSTY BULK FLOW EVENTS AND SUBSTO
 RMS

Period	Obligations	
09/21/1994-09/30/1997	FY94: \$28,800	TOTAL: \$28,800
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F V CORONITI	HQ/E C WHIPPLE	13-Physics
	HQ/J D BOHLIN	

NAG10-52 University of California - Los Angeles 2462
 A POROUS GROWTH SYSTEM

Period	Obligations	
09/30/1988-02/28/1995	FY94: \$90,651	TOTAL: \$578,621
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W L BERRY	KSC/W M KNOTT	55-Agriculture Sci

NAS 1-19956 University of California - Los Angeles 2463
 SAGE II SCIENTIFIC INVESTIGATIONS

Period	Obligations	
04/12/1993-04/15/1996	FY94: \$85,000	TOTAL: \$175,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R P TURCO	LARC/G L MADDREA	31-Atmos Sci
	LARC/L R POOLE	

NAS 3-25975 University of California - Los Angeles 2464
 RISK BASED SPACECRAFT FIRE SAFETY EXPERIMENTS/CONC EPT
 DEVELOPMENT PHASE B

Period	Obligations	
04/23/1991-08/15/1994	FY94: \$0	TOTAL: \$581,077
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G E APOSTOLAKIS	LERC/R FRIEDMAN	46-Mech Engr
I CATTON	LERC/S E WASHINGTON	

NAS 5-29363 University of California - Los Angeles 2465
 GUARENTEED TIME OBSERVATIONS OF THE HIGH RESOLUTION
 SPECTROGRAPH OF THE HUBBLE SPACE TELESCOPE

Period	Obligations	
12/12/1986-10/26/1994	FY94: \$0	TOTAL: \$64,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M JURA	GSFC/H D VITAGLIANO	11-Astronomy

NAS 5-30373 University of California - Los Angeles 2466
 MAGNETIC FIELD INVESTIGATION FOR POLAR SPACECRAFT

Period	Obligations	
04/12/1989-04/01/1994	FY94: \$279,800	TOTAL: \$2,725,300
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C T RUSSELL	GSFC/D CROSBY	11-Astronomy

NAS 9-18773 University of California - Los Angeles 2467
 RELATIONSHIP OF LONG-TERM ELECTROMYOGRAPHIC ACTIVI TY
 TO MUSCLE ATROPHY AND PERFORMANCE

Period	Obligations	
10/27/1992-01/01/1997	FY94: \$291,000	TOTAL: \$536,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R EGGERTON	JSC/A PLAZA	51-Biological Sci

NASW 4891 University of California - Los Angeles 2468
 BASIC RESEARCH ON LOW VELOCITY BOILING HEAT TRX AND 2
 PHASE PRESSURE DROP EXPERIMENTS IN SPACE

Period	Obligations	
05/12/1994-02/11/1995	FY94: \$91,601	TOTAL: \$91,601
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V K DHIR	HQ/A DOUGHERTY	19-Phys Sci, NEC

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCA 2-689 University of California - Los Angeles 2469
DYNAMICAL MODELLING OF A JOVIAN CUMULUS
Period *Obligations*
03/02/1992-03/31/1994 FY94: \$0 TOTAL: \$17,996
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G SCHUBERT ARC/C R STOKER 13-Physics

NCA 2-806 University of California - Los Angeles 2470
THE AFFECT OF RECYCLED NUTRIENTS ON THE SHORT TERM
CONTROL OF NUTRIENT SOLUTIONS
Period *Obligations*
04/02/1993-10/31/1993 FY94: TOTAL: \$14,460
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W BERRY ARC/D BUBENHEIM 54-Env Biology

NCC 2-374 University of California - Los Angeles 2471
LABORATORY FOR FLIGHT-SYSTEMS RESEARCH
Period *Obligations*
10/01/1987-10/31/1994 FY94: \$1,251,402 TOTAL: \$6,012,661
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A V BALAKRISHNAN ARC/K W ILIFF 49-Engr, NEC

NCC 2-535 University of California - Los Angeles 2472
MUSCLE FEASIBILITY FOR RHESUS
Period *Obligations*
06/01/1988-09/30/1994 FY94: \$100,000 TOTAL: \$1,042,449
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V R EDGERTON ARC/J P CONNOLLY 51-Biological Sci
R R ROY ARC/R W BALLARD
J H HODGSON

NCC 2-804 University of California - Los Angeles 2473
PSYCHOPHYSIOLOGY OF HUMANS IN SPACE
Period *Obligations*
06/03/1993-09/14/1994 FY94: \$90,000 TOTAL: \$381,619
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P S COWINGS ARC/A R HARGENS 59-Life Sci, NEC

NCC 2-826 University of California - Los Angeles 2474
ADVANCING THE SIENCE EXPERIENCES OF YOUNG CHILDREN (2-5
YEARS)
Period *Obligations*
09/16/1993-02/14/1995 FY94: \$121,973 TOTAL: \$211,973
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R GELMAN ARC/L C SHELTER 69-Psych, NEC
L TRAVIS ARC/K W ILIFF
L WATROUS

NCC 2-869 University of California - Los Angeles 2475
DEVELOPMENT OF AN EFFICACIOUS EXERCISE AS A COUNT E R
MEASURE OF MUSCLE ATROPHY
Period *Obligations*
07/11/1994-03/31/1995 FY94: \$69,931 TOTAL: \$69,931
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V R EDGERTON ARC/R E GRINDELAND 56-Medical Sciences
R R ROY
J A HODGSON

NGT 00-030-079 University of California - Los Angeles 2476
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/17/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A TABAZADEH HQ/D M BUTLER 31-Atmos Sci
R TURCO HQ/G S WILSON

NGT 00-030-148 University of California - Los Angeles 2477
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/27/1992-08/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M ANDERSON HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-050-444 University of California - Los Angeles 2478
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/11/1989-12/31/1993 FY94: \$0 TOTAL: \$94,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P P FRIEDMANN HQ/F C OWENS 41-Aero Engr

NGT 00-050-618 University of California - Los Angeles 2479
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/26/1990-06/30/1993 FY94: \$0 TOTAL: \$65,430
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M G KUELSON HQ/F C OWENS 13-Physics

NGT 00-050-807 University of California - Los Angeles 2480
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/20/1991-09/30/1994 FY94: \$0 TOTAL: \$65,780
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I S MCLEAN HQ/J K ALEXANDER 11-Astronomy

NGT 00-051-000 University of California - Los Angeles 2481
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
10/30/1992-09/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A PAIGE HQ/J K ALEXANDER 13-Physics

NGT 00-051-148 University of California - Los Angeles 2482
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/28/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W GEKELMAN HQ/D HOLLAND 13-Physics

NGT 00-051-173 University of California - Los Angeles 2483
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/19/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P P FRIEDMAN ARC/M MOORE 41-Aero Engr

NGT 00-051-175 University of California - Los Angeles 2484
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/18/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V R EDGERTON ARC/M MOORE 56-Medical Sciences

NGT 00-051-273 University of California - Los Angeles 2485
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A PAUGE JPL/C HIX 32-Geological Sci

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NSG-5272 University of California - Los Angeles 2486
PROBLEMS OF MASS LOSS AND MASS TRANSFER IN CLOSE BINARY SYSTEMS
Period *Obligations*
05/01/1978-04/30/1995 FY94: \$20,414 TOTAL: \$336,410
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M J PLAVEC GSFC/D WEST 11-Astronomy
C D KEYES

NAG 5-2027 University of California - Riverside 2487
COMPTTEL STUDY OF NEUTRONS AND GAMMA RAYS FROM SOLA R FLARES
Period *Obligations*
07/17/1992-11/30/1994 FY94: \$80,000 TOTAL: \$191,044
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
T J O'NEILL GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2044 University of California - Riverside 2488
SPECTRAL AND TIME VARIABILITY STUDIES OF ACCRETING MEDIUM ENERGY GAMMA RAY SOURCES WITH TE COMPTTEL.
Period *Obligations*
07/28/1992-01/31/1995 FY94: \$35,000 TOTAL: \$85,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A D ZYCH GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 8-956 University of California - Riverside 2489
PROTEIN CRYSTALLIZATION EXPERIMENT
Period *Obligations*
05/13/1993-09/30/1995 FY94: \$155,258 TOTAL: \$247,017
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A MCPHERSON MSFC/B J HERREN 12-Chemistry

NAG 8-957 University of California - Riverside 2490
ADVANCED LIQUID-LIQUID DIFFUSION INSTRUMENT FOR PROTEIN CRYSTAL GROWTH
Period *Obligations*
05/04/1993-09/30/1995 FY94: \$331,182 TOTAL: \$457,722
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A MCPHERSON MSFC/B J HERRON 12-Chemistry

NAGW 1996 University of California - Riverside 2491
UCR GAMMA RAY ASTRONOMY PROGRAM
Period *Obligations*
02/27/1990-11/30/1994 FY94: \$270,000 TOTAL: \$1,065,849
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A ZYCH HQ/L J KALUZIENSKI 11-Astronomy
R S WHITE

NAS 8-39763 University of California - Riverside 2492
CRYSTAL GROWTH FLIGHT APPARATUS
Period *Obligations*
10/30/1992-12/31/1994 FY94: \$899,358 TOTAL: \$1,877,508
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A MCPHERSON MSFC/R KING 12-Chemistry

NGT 00-070-261 University of California - Riverside 2493
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
05/15/1992-06/30/1995 FY94: \$4,000 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
O A CHADWICK JPL/H ASHKENAS 55-Agriculture Sci

NAG 1-1051 University of California - San Diego 2494
MONOLITH CATALYSTS FOR CLOSED-CYCLE CARBON DIOXIDE LASERS D
Period *Obligations*
08/16/1989-03/31/1994 FY94: \$0 TOTAL: \$120,300
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R K HERZ LARC/D R SCHRYER 43-Chem Engr
LARC/L J ROSE

NAG 1-1193 University of California - San Diego 2495
SUPERSONIC MIXING LAYERS W/ AND W/O COMBUSTION
Period *Obligations*
10/22/1990-06/30/1994 FY94: \$1,700 TOTAL: \$82,211
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
P A LIBBY LARC/T B GATSKI 41-Aero Engr
F A WILLIAMS LARC/J P DRUMMOND

NAG 1-1259 University of California - San Diego 2496
A STUDY OF CLOUD RADIATIVE FORCING AND FEEDBACK - FDP
Period *Obligations*
04/19/1991-04/07/1995 FY94: \$165,000 TOTAL: \$574,785
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
V RAMANATHAN LARC/B A WIELICKI 32-Geological Sci
LARC/J W YOUNGBLOOD

NAG 1-1445 University of California - San Diego 2497
EXTENSION-BEND-TWIST-SHEAR COUPLING BEHAVIOR OF PRETWISTED ADVANCED COMPOSITE BEAMS
Period *Obligations*
08/03/1992-12/31/1994 FY94: \$37,500 TOTAL: \$100,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J B KOSMATKA LARC/R C LAKE 41-Aero Engr

NAG 1-1516 University of California - San Diego 2498
THE INTERACTION OF A SHOCK WITH SHEARED TURBULENCE NLPN 93-415
Period *Obligations*
06/29/1993-06/30/1995 FY94: \$35,000 TOTAL: \$72,260
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
S SARKAR LARC/J DRUMMOND 41-Aero Engr

NAG 1-1535 University of California - San Diego 2499
A HYBRID SIMULATION OF THE ACOUSTIC RADIATION FROM GRID TURBULENCE
Period *Obligations*
09/20/1993-09/30/1994 FY94: \$40,000 TOTAL: \$64,246
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
S SARKAR LARC/W E ZORUMSKI 41-Aero Engr

NAG 2-153 University of California - San Diego 2500
PIONEER 10 AND 11 DATA ANALYSIS
Period *Obligations*
01/01/1982-09/30/1994 FY94: \$0 TOTAL: \$1,664,842
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
W FILLIUS ARC/L E LASHER 19-Phys Sci, NEC
ARC/J R PHILLIPS

NAG 2-601 University of California - San Diego 2501
PULMONARY GAS EXCHANGE, VENTILATION AND BLOOD FLOW IN MICROGRAVITY
Period *Obligations*
09/08/1989-10/31/1993 FY94: \$0 TOTAL: \$309,950
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J B WEST ARC/C M WINGET 51-Biological Sci
H J GUY ARC
A R ELLIOTT

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 2-653 University of California - San Diego 2502
ADAPTATION OF SKELETAL MUSCLE TO SPACEFLIGHT: CO SMOS RHESUS PROJECT
Period *Obligations*
07/02/1990-10/31/1993 FY94: \$0 TOTAL: \$233,374
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S FOWLER ARC/J P CONNOLLY 51-Biological Sci
ARC/R W BALLARD

NAG 2-714 University of California - San Diego 2503
ADAPTIVE RESPONSE OF SLOW AND FAST SKELETAL MUSCLE IN THE MONKEY TO SPACEFLIGHT: RHESUS PROJECT
Period *Obligations*
06/27/1991-03/31/1995 FY94: \$90,454 TOTAL: \$276,509
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S BODINE-FOWLER ARC/C M WINGET 51-Biological Sci

NAG 2-873 University of California - San Diego 2504
A DISTRIBUTED COGNITION FIELD ANALYSIS OF THE USE OF TWO ATC AUTOMATION TOOLS
Period *Obligations*
09/20/1993-09/30/1994 FY94: \$0 TOTAL: \$75,695
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E L HUTCHINS ARC/L TOBIAS 62-Social Aspects
ARC/T J DAVIS

NAG 2-934 University of California - San Diego 2505
RADIATIVE EFFECTS OF ATMOSPHERIC AEROSOLS
Period *Obligations*
09/27/1994-04/30/1995 FY94: \$95,000 TOTAL: \$95,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F P VALERO ARC/P PILEWSKIE 31-Atmos Sci
ARC/M V KLUG

NAG 3-1081 University of California - San Diego 2506
SCIENTIFIC SUPPORT FOR A PROPOSED SPACE SHUTTLE DROPLET BURNING EXPERIMENT
Period *Obligations*
11/01/1989-01/14/1995 FY94: \$80,000 TOTAL: \$362,510
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F A WILLIAMS LERC/H D ROSS 49-Engr, NEC

NAG 3-1243 University of California - San Diego 2507
VAPOR-PRESSURE PUMPED HEAT-TRANSFER LOOP
Period *Obligations*
03/08/1991-10/24/1993 FY94: TOTAL: \$82,832
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K O LUND LERC/K W BAKER 46-Mech Engr
LERC/M O DUSTIN

NAG 3-1248 University of California - San Diego 2508
HIGH-PRESSURE COMBUSTION OF BINARY-FUEL DROPLETS
Period *Obligations*
03/12/1991-12/14/1994 FY94: \$35,000 TOTAL: \$130,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F A WILLIAMS LERC/H D ROSS 46-Mech Engr

NAG 5-236 University of California - San Diego 2509
EFFECTS OF GLOBAL TROPICAL WEATHER SATELLITE DATA ON PREDICTABILITY OF PLANETARY WAVES
Period *Obligations*
05/15/1982-09/30/1993 FY94: \$0 TOTAL: \$775,713
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C SOMERVILLE GSFC/M SUAREZ 31-Atmos Sci
J ROADS

NAG 5-530 University of California - San Diego 2510
RESEARCH RELATIVE TO GAMMA-RAY SPECTROMETER DEVELOPMENT
Period *Obligations*
04/01/1985-09/30/1992 FY94: \$0 TOTAL: \$240,698
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J ARNOLD GSFC/J I TROMBKA 32-Geological Sci
GSFC/R L SCHMADEBECK

NAG 5-1372 University of California - San Diego 2511
ASTROPHYSICS OF FAST X-RAY PULSERS
Period *Obligations*
04/23/1990-05/31/1993 FY94: \$0 TOTAL: \$58,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E GRUBER GSFC/D WEST 11-Astronomy

NAG 5-1492 University of California - San Diego 2512
PHYSICS OF BOUNDARIES AND THEIR INTERACTION IN SPACE PLASMAS
Period *Obligations*
01/08/1991-12/31/1994 FY94: \$310,000 TOTAL: \$1,102,570
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N OMIDI GSFC/T J BIRMINGHAM 13-Physics
K B QUEST

NAG 5-1499 University of California - San Diego 2513
X-RAY INVESTIGATION OF INTERGALACTIC VOIDS
Period *Obligations*
03/27/1991-12/31/1992 FY94: TOTAL: \$43,577
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W H TUCKER GSFC/D WEST 11-Astronomy

NAG 5-1597 University of California - San Diego 2514
THEORETICAL CALCULATIONS OF SOLAR FLARE NEUTRONS AND GAMMA RAYS TO SUPPORT GRO OBSERVATIONS
Period *Obligations*
05/09/1991-09/30/1995 FY94: \$109,259 TOTAL: \$279,259
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E LINGENFELTER GSFC/J NORRIS 11-Astronomy
GSFC/D A KNIFFEN

NAG 5-1630 University of California - San Diego 2515
GUARANTEED TIME OBSERVATIONS SUPPORT FOR FAINT OBJECT SPECTROGRAPH (FOS) ON HST
Period *Obligations*
06/24/1991-10/31/1994 FY94: \$3,003,900 TOTAL: \$10,106,723
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R HARMS GSFC/S SOBIESKI 11-Astronomy

NAG 5-1858 University of California - San Diego 2516
GUARANTEED TIME OBSERVATIONS OF THE HIGH RESOLUTION SPECTROGRAPH OF THE HUBBLE SPACE TELESCOPE
Period *Obligations*
01/03/1992-11/14/1994 FY94: \$157,000 TOTAL: \$444,640
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E BEAVER GSFC/A SMITH 11-Astronomy

NAG 5-1868 University of California - San Diego 2517
DETECTION OF TAU NEUTRINO DECAY PHOTONS
Period *Obligations*
02/01/1992-01/31/1993 FY94: \$0 TOTAL: \$3,591
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Y REPHAELL GSFC/D WEST 11-Astronomy

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAG 5-1910 University of California - San Diego 2518
SPACE GEODETIC DETECTORS OF TECTONIC SIGNALS
Period Obligations
02/21/1992-02/28/1995 FY94: \$62,000 TOTAL: \$176,968
Prin. Invest. NASA Tech. Officer CASE Category
J B MINSTER GSFC/B G BILLS 32-Geological Sci

NAG 5-1914 University of California - San Diego 2519
PROGRAM FOR CONTINUED DEVELOPMENT AND USE OF OCEAN
ACOUSTIC/GPS GEODETIC TECHNIQUES
Period Obligations
02/26/1992-02/28/1995 FY94: \$150,000 TOTAL: \$520,000
Prin. Invest. NASA Tech. Officer CASE Category
F N SPIESS GSFC/B G BILLS 32-Geological Sci

NAG 5-1917 University of California - San Diego 2520
PERMANENT GPS GEODETIC ARRAY IN SOUTHERN CALIFORNIA
Period Obligations
04/20/1992-04/30/1995 FY94: \$129,000 TOTAL: \$369,000
Prin. Invest. NASA Tech. Officer CASE Category
Y BOCK GSFC/B G BILLS 32-Geological Sci

NAG 5-1932 University of California - San Diego 2521
A FLINN STATION AT PINON FLAT OBSERVATORY
Period Obligations
03/04/1992-03/14/1995 FY94: \$40,000 TOTAL: \$120,000
Prin. Invest. NASA Tech. Officer CASE Category
D C AGNEW GSFC/B G BILLS 32-Geological Sci

NAG 5-1977 University of California - San Diego 2522
SEARCH FOR THE X-RAY COUNTERPART OF THE 5 MARCH 1979
GAMMA RAY BURST
Period Obligations
05/04/1992-05/14/1994 FY94: \$0 TOTAL: \$18,000
Prin. Invest. NASA Tech. Officer CASE Category
R E ROTHSCHILD GSFC/R PETRE 11-Astronomy

NAG 5-1995 University of California - San Diego 2523
THE MEAN HIGH ENERGY X SPECTRUM OF ACTIVE GALACTIC
NUCLEI
Period Obligations
06/12/1992-06/14/1994 FY94: \$10,000 TOTAL: \$50,400
Prin. Invest. NASA Tech. Officer CASE Category
Y REPHAELI GSFC/D WEST 11-Astronomy

NAG 5-2059 University of California - San Diego 2524
THE SPECTRAL ENERGY DISTRIBUTION OF HIGH-REDSHIFT QSOs
OBSERVED WITH ROSAT AND THE HST
Period Obligations
08/05/1992-08/14/1994 FY94: \$0 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
R D COHEN GSFC/R PETRE 11-Astronomy

NAG 5-2127 University of California - San Diego 2525
THE X-RAY TO IR CONTINUUM OF PG 1522+101
Period Obligations
10/28/1992-01/31/1995 FY94: \$5,817 TOTAL: \$10,817
Prin. Invest. NASA Tech. Officer CASE Category
R D COHEN GSFC/D WEST 11-Astronomy

NAG 5-2197 University of California - San Diego 2526
AN INVESTIGATION OF INTERCLUSTER GAS IN SUPERCLUSTER
CORES
Period Obligations
03/01/1993-02/28/1994 FY94: \$0 TOTAL: \$8,700
Prin. Invest. NASA Tech. Officer CASE Category
Y REPHAELI GSFC/R PETRE 11-Astronomy

NAG 5-2236 University of California - San Diego 2527
OSSE MEASUREMENTS OF THE COMA CLUSTER
Period Obligations
04/08/1993-04/14/1995 FY94: \$0 TOTAL: \$39,772
Prin. Invest. NASA Tech. Officer CASE Category
Y REPHAELI GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2333 University of California - San Diego 2528
ORBITAL GAMMA RAY INSTRUMENT FOR PLANETARY MISSIONS
Period Obligations
07/27/1993-07/31/1994 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
J R ARNOLD GSFC/J I TROMBKA 11-Astronomy

NAG 5-2479 University of California - San Diego 2529
THE NATURE OF EMISSION FROM X-RAY LUMINOUS GALAXIES
Period Obligations
01/14/1994-01/31/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
D GRUBER GSFC/N WHITE 11-Astronomy

NAG 5-2517 University of California - San Diego 2530
THE NATURE OF X-RAY EMISSION FROM NARROW-LINE RADIO
GALAXIES
Period Obligations
02/21/1994-03/14/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
R D COHEN GSFC/N WHITE 11-Astronomy

NAG 5-5025 University of California - San Diego 2531
LABORATORY INVESTIGATIONS OF THE OCEAN SURFACE
ROUGHNESS STRUCTURES: THEIR GENERATION AND EVOLUTION
Period Obligations
07/07/1994-07/07/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
B JAEHNE GSFC/S R LONG 33-Oceanography
GSFC/N E HUANG

NAG 9-33 University of California - San Diego 2532
HISTORICAL STUDIES EXTRATERRESTRIAL MATERIAL
Period Obligations
02/01/1983-06/01/1994 FY94: \$0 TOTAL: \$1,447,790
Prin. Invest. NASA Tech. Officer CASE Category
J R ARNOLD JSC/I D BROWNE 12-Chemistry

NAG 9-41 University of California - San Diego 2533
SOLAR SYSTEM HISTORY
Period Obligations
02/01/1983-02/01/1994 FY94: \$0 TOTAL: \$1,228,030
Prin. Invest. NASA Tech. Officer CASE Category
K MARTI JSC/I D BROWNE 19-Phys Sci, NEC
G W LUGMAIR

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 9-49 University of California - San Diego 2534
 INVESTIGATE EXTRATERRESTRIAL MATERIALS
Period Obligations
 02/01/1983-03/01/1994 FY94: \$0 TOTAL: \$2,590,859
Prin. Invest. NASA Tech. Officer CASE Category
 G W LUGMAIR JSC/I D BROWNE 32-Geological Sci

NAGW 1031 University of California - San Diego 2542
 RUST MINERALS AS TEMPLATES FOR ORGANIC MOLECULES
Period Obligations
 01/01/1987-12/31/1995 FY94: \$86,035 TOTAL: \$690,806
Prin. Invest. NASA Tech. Officer CASE Category
 G ARRHENIUS HQ/J D RUMMEL 51-Biological Sci

NAG 9-83 University of California - San Diego 2535
 OXYGEN ISOTOPIC ANOMALIES METEORITES
Period Obligations
 03/01/1984-03/01/1993 FY94: \$0 TOTAL: \$413,110
Prin. Invest. NASA Tech. Officer CASE Category
 M H THIEMENS JSC/I D BROWNE 32-Geological Sci

NAGW 1150 University of California - San Diego 2543
 USE OF GENERALIZED ADIABETIC THEORY TO STUDY
 MAGNETOSPHERIC
Period Obligations
 09/09/1987-09/30/1994 FY94: \$0 TOTAL: \$426,000
Prin. Invest. NASA Tech. Officer CASE Category
 E C WHIPPLE HQ/M M MELLOTT 13-Physics
 HQ/T W PERRY

NAG 9-271 University of California - San Diego 2536
 PULMONARY FUNCTION DURING MICROGRAVITY
Period Obligations
 03/11/1988-09/30/1995 FY94: \$0 TOTAL: \$281,132
Prin. Invest. NASA Tech. Officer CASE Category
 J B WEST JSC/J B CHARLES 56-Medical Sciences

NAGW 1502 University of California - San Diego 2544
 SMALL BODIES IN THE SOLAR SYSTEM COMETS
Period Obligations
 11/14/1988-11/30/1994 FY94: \$88,000 TOTAL: \$470,500
Prin. Invest. NASA Tech. Officer CASE Category
 D A MENDIS HQ/J T BERGSTRALH 11-Astronomy

NAG 9-470 University of California - San Diego 2537
 ESTABLISH NEW GRANT
Period Obligations
 08/28/1990-01/01/1993 FY94: \$0 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
 J M RICLES JSC/S H GOLDSTEIN 21-Mathematics

NAGW 1737 University of California - San Diego 2545
 PROPERTIES OF QUASI-STELLAR OBJECTS
Period Obligations
 04/07/1989-11/30/1993 FY94: \$8,627 TOTAL: \$363,546
Prin. Invest. NASA Tech. Officer CASE Category
 G R BURBIDGE HQ/G CLAYTON 99-Multi-Discip

NAG 9-706 University of California - San Diego 2538
 CALIF SPACE GRANT STUDENT TRAINING PROGRAM IN
 DEVELOPING A RESEARCH AND EDUCATIONAL DATABASE OF
 EARTH
Period Obligations
 11/29/1993-07/01/1994 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
 S K RIDE JSC/D E PITTS 19-Phys Sci, NEC

NAGW 1806 University of California - San Diego 2546
 A KINETIC STUDY OF THE SOLAR WIND COMA INTERACTION
Period Obligations
 07/11/1989-10/30/1994 FY94: \$66,000 TOTAL: \$313,139
Prin. Invest. NASA Tech. Officer CASE Category
 N OMIDI HQ/M M MELLOTT 13-Physics
 HQ/T W PERRY

NAGW 449 University of California - San Diego 2539
 HIGH RESOLUTION GAMMA-RAY SPECTROSCOPY OF COSMIC
 SOURCES
Period Obligations
 03/15/1983-10/31/1994 FY94: \$600,000 TOTAL: \$10,032,855
Prin. Invest. NASA Tech. Officer CASE Category
 J L MATTESON HQ/L J KALUZIENSKI 11-Astronomy
 HQ/A N BUNNER

NAGW 1952 University of California - San Diego 2547
 RESEARCH ON CLIMATE AND OCEAN DYNAMICS USING ERS-1
 OBSERVATIONS
Period Obligations
 02/07/1990-05/31/1994 FY94: \$0 TOTAL: \$170,132
Prin. Invest. NASA Tech. Officer CASE Category
 T P BARNETT HQ/G S LAGERLOEF 31-Atmos Sci
 HQ/W S WILSON

NAGW 683 University of California - San Diego 2540
 UNIVERSITY RESEARCH
Period Obligations
 12/01/1984-04/30/1994 FY94: \$0 TOTAL: \$1,202,948
Prin. Invest. NASA Tech. Officer CASE Category
 J J SIMPSON HQ/M R LEWIS 33-Oceanography
 HQ/W S WILSON

NAGW 1970 University of California - San Diego 2548
 THEORETICAL STUDIES IN GAMMA-RAY ASTROPHYSICS
Period Obligations
 01/05/1990-10/31/1994 FY94: \$90,000 TOTAL: \$449,661
Prin. Invest. NASA Tech. Officer CASE Category
 R E LINGENFELTER HQ/L J KALUZIENSKI 11-Astronomy

NAGW 897 University of California - San Diego 2541
 NO COST EXTENSION UNDER THE ELIMINATION OF UNNECESSARY
 ADMIN
Period Obligations
 02/11/1991-09/30/1994 FY94: \$0 TOTAL: \$195,187
Prin. Invest. NASA Tech. Officer CASE Category
 J B WEST HQ/R J WHITE 51-Biological Sci

NAGW 2002 University of California - San Diego 2549
 HELIOS PHOTOMETER CHARACTERIZATION OF INTERPLANETARY
 STRUCTURES
Period Obligations
 05/04/1990-02/28/1995 FY94: \$50,940 TOTAL: \$270,940
Prin. Invest. NASA Tech. Officer CASE Category
 B V JACKSON HQ/W V JONES 13-Physics
 HQ/J C LING

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2034 University of California - San Diego 2550
GLOBAL ATMOSPHERIC GASES EXPERIMENT (GAGE)
Period *Obligations*
07/16/1990-01/31/1995 FY94: \$439,273 TOTAL: \$2,130,116
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R F WEISS HQ/M J KURYLO 31-Atmos Sci
HQ/M J PRATHER

NAGW 2119 University of California - San Diego 2551
NAGW-2119/UNIV OF CALIF in SAN DIEGO/QSO ABSORPTION AND GALAXY EVOLUTION FROM REDSHIFT ZERO TO FOUR
Period *Obligations*
05/30/1990-12/31/1994 FY94: \$175,000 TOTAL: \$883,822
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A M WOLFE HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2215 University of California - San Diego 2552
ASTEROID SURFACE PROCESSES
Period *Obligations*
08/09/1990-12/31/1992 FY94: \$0 TOTAL: \$53,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L MCFADDEN HQ/T A MAXWELL 32-Geological Sci

NAGW 2251 University of California - San Diego 2553
NAGW-2251/UNIV CA/ISOTOPIC FRACTIONATION PROCESSES DURING PRE-SOLAR GRAIN FORMATION
Period *Obligations*
05/23/1991-10/31/1994 FY94: \$37,000 TOTAL: \$146,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M H THIEMENS HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2252 University of California - San Diego 2554
NAGW-2252/UNIV OF CA in SAN DIEGO/DUST AND PLASMA EFFECTS IN THE FORMATION OF SOLAR SYSTEMS
Period *Obligations*
03/11/1991-04/30/1995 FY94: \$10,000 TOTAL: \$130,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A MENDIS HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2542 University of California - San Diego 2555
CARBON AND HYDROGEN ISOTOPE COMPOSITION AND 14C CONCENTRATION IN METHANE FROM SOURCES
Period *Obligations*
10/28/1991-06/30/1994 FY94: \$0 TOTAL: \$303,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M WAHLEN HQ/A C JANETOS 31-Atmos Sci
HQ/D E WICKLAND

NAGW 2577 University of California - San Diego 2556
SURFACE CHEMICAL COMPOSITION DETERMINATION FROM THE MARS '94 GAMMA RAY PROJECT
Period *Obligations*
08/12/1991-06/30/1993 FY94: \$0 TOTAL: \$61,260
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R ARNOLD HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2591 University of California - San Diego 2557
NAGW-2591/UNIV CA in LA JOLLA/STUDY OF SOLAR LUMINOSITY VARIATIONS
Period *Obligations*
08/19/1991-09/30/1992 FY94: \$365 TOTAL: \$34,555
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H HUDSON HQ/W J WAGNER 13-Physics
HQ/K LANG

NAGW 2609 University of California - San Diego 2558
PRODUCTION AND PROPAGATION OF SOLAR FLARE CHARGED PARTICLE SECONDARY
Period *Obligations*
07/15/1991-02/28/1995 FY94: \$15,000 TOTAL: \$105,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E LINGENFELTER HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 2618 University of California - San Diego 2559
ELECTRON DYNAMICS AND TRANSPORT PROPERTIES AT PLA SMA DISCONTINUITIES
Period *Obligations*
07/18/1991-05/31/1996 FY94: \$45,150 TOTAL: \$189,773
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D KRAUSS-VARBAN HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 2641 University of California - San Diego 2560
PERMANENT GPS GEODETIC ARRAY IN SOUTHERN CALIFORNIA
Period *Obligations*
07/15/1991-03/31/1993 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Y BOCK HQ/M BALTUCK 32-Geological Sci
HQ/B J MALCOLM

NAGW 2727 University of California - San Diego 2561
TRACE GAS EMISSIONS TO THE ATMOSPHERE BY BIOMASS BURNING IN THE WEST AFRICAN SAVANNAS
Period *Obligations*
09/10/1991-03/31/1994 FY94: \$0 TOTAL: \$249,510
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J FROUIN HQ/A C JANETOS 39-Env Sci, NEC
HQ/R T WATSON

NAGW 2746 University of California - San Diego 2562
ENVIRONMENTAL RESEARCH
Period *Obligations*
09/19/1991-11/30/1993 FY94: \$0 TOTAL: \$32,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
U HERZFELD HQ/R SCHIFFER 39-Env Sci, NEC
C DE MOUSTIER HQ/D M BUTLER

NAGW 2774 University of California - San Diego 2563
OCEAN COLOR REMOTE SENSING DURING THE 1992 RACER CAMPAIGN USING THE AIRBORNE POLDER INST.
Period *Obligations*
11/15/1991-12/31/1993 FY94: \$0 TOTAL: \$272,004
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R FROUIN HQ/B G MITCHELL 33-Oceanography
HQ/D E WICKLAND

NAGW 2849 University of California - San Diego 2564
OBSERVATIONAL BIAS ANALYSIS OF THE NEAR-EARTH ASTEROID POPULATION
Period *Obligations*
01/29/1992-04/30/1993 FY94: \$0 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L MCFADDEN HQ/W L QUAIDE 11-Astronomy

NAGW 2881 University of California - San Diego 2565
THE CHEMISTRY OF EARLY SELF-REPLICATING SYSTEMS
Period *Obligations*
02/26/1992-12/31/1994 FY94: \$942,000 TOTAL: \$2,809,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S L MILLER HQ/R J WHITE 59-Life Sci, NEC

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 2946 University of California - San Diego 2566
EXPERIMENTAL MEASUREMENT AND THEORETICAL MODELLING OF
MICROWAVE SCATTERING
Period *Obligations*
03/06/1992-12/31/1994 FY94: \$40,000 TOTAL: \$264,428
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W K MELVILLE HQ/J S THEON 33-Oceanography

NAGW 2964 University of California - San Diego 2567
ANALYSIS OF LONG-TERM CLOUD COVER, RADIATIVE FLUXES,
AND SEA SURFACE TEMPERATURES IN THE EASTERN
Period *Obligations*
03/20/1992-12/31/1994 FY94: \$168,697 TOTAL: \$473,654
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J J SIMPSON HQ/J C DODGE 33-Oceanography
HQ/R A SCHIFFER

NAGW 2966 University of California - San Diego 2568
GEOMAGNETIC FIELD MODELS INCORPORATING PHYSICAL CO
NSTRRAINTS ON THE SECULAR VARIATION
Period *Obligations*
03/11/1992-12/31/1993 FY94: \$0 TOTAL: \$145,424
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C CONSTABLE HQ/A J ANDERSON 32-Geological Sci
HQ/N B DOUGLAS

NAGW 2967 University of California - San Diego 2569
HYDROMAGNETIC CONDITIONS NEAR THE CORE-MANTLE BOUN
DARY
Period *Obligations*
03/10/1992-03/14/1994 FY94: \$0 TOTAL: \$82,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G BACKUS HQ/R E MURPHY 32-Geological Sci
HQ/D M BUTLER

NAGW 2987 University of California - San Diego 2570
ASSESSMENT OF ANTHROPOGENIC AND CLIMATE IMPACTS ON
THE GLOBAL CARBON CYCLE
Period *Obligations*
03/20/1992-01/31/1995 FY94: \$180,000 TOTAL: \$510,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C D KEELING HQ/R E MURPHY 39-Env Sci, NEC
HQ/D M BUTLER

NAGW 3035 University of California - San Diego 2571
NAGW-3035/UNIV CA @ SAN DIEGO/GLOBAL GEODYNAMIC
APPLICATIONS OF SATELLITE ALTIMETRY
Period *Obligations*
04/17/1992-12/31/1994 FY94: \$75,000 TOTAL: \$218,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D T SANDWELL HQ/R E MURPHY 32-Geological Sci
HQ/D M BUTLER

NAGW 3127 University of California - San Diego 2572
MID-INFRARED OBSERVATIONAL AND THEORETICAL STUDIES O F
STAR FORMATION AND EARLY SOLAR SYSTEMS
Period *Obligations*
07/15/1992-05/31/1995 FY94: \$25,000 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B JONES HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3128 University of California - San Diego 2573
USE OF DZCS DATA IN MODELING OCEAN SEASONAL THERMO
LINE
Period *Obligations*
07/24/1992-04/30/1995 FY94: \$100,000 TOTAL: \$253,124
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P NIILER HQ/R E MURPHY 33-Oceanography
HQ/J A KAYE

NAGW 3179 University of California - San Diego 2574
NAGW-3179/UNIV CA @ SAN DIEGO/STUDIES OF PLASMA FLOW
PAST JUPITER'S SATELLITE IO
Period *Obligations*
09/12/1992-01/25/1994 FY94: \$0 TOTAL: \$58,801
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LINKER HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 3247 University of California - San Diego 2575
VIDEO LESSON PLANS FOR JUNIOR HIGH SCHOOL
Period *Obligations*
10/26/1992-07/31/1994 FY94: \$0 TOTAL: \$5,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W H TUCKER HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 3285 University of California - San Diego 2576
NAGW-3285/SCRIPPS INST. OF OCEANOGRAPHY/ISOTOPIC,
CHEMICAL, AND MINERALOGICAL INVESTIGATIONS
Period *Obligations*
11/27/1992-11/30/1994 FY94: \$307,283 TOTAL: \$606,215
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G W LUGMAIR HQ/H C BRINTON 32-Geological Sci

NAGW 3428 University of California - San Diego 2577
FRAGMENTARY SOLAR SYSTEM HISTORY
Period *Obligations*
03/01/1993-12/31/1994 FY94: \$115,463 TOTAL: \$237,003
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K MARTI HQ/H C BRINTON 32-Geological Sci

NAGW 3498 University of California - San Diego 2578
NAGW-3498/UNIV CALIF SAN DIEGO/INVERSION SCHEMES P
ARAMETER DATA
Period *Obligations*
04/29/1993-12/31/1994 FY94: \$150,000 TOTAL: \$195,535
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R FROUIN HQ/D E WICKLAND 33-Oceanography
HQ/A C JANETOS

NAGW 3503 University of California - San Diego 2579
UNIV CALIF SAN DIEGO/ANALYSIS OF TRENCH/OUTER RISE
TOPOGRAPHY ON VENUS
Period *Obligations*
04/12/1993-03/31/1995 FY94: \$40,176 TOTAL: \$96,012
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D T SANDWELL HQ/J T BERGSTRALH 32-Geological Sci

NAGW 3551 University of California - San Diego 2580
METEORITIC SULFUR ISOTOPIC ANALYSIS
Period *Obligations*
04/23/1993-02/28/1995 FY94: \$58,855 TOTAL: \$120,807
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M THIEMANS HQ/J BOYCE 32-Geological Sci

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAGW 3795 University of California - San Diego 2581
NAGW-3795/UNIV CALIF SAN DIEGO/PHYCOERYTHRIN CONTA INING
PHYTOPLANKTON TO REMOTELY SENSED SIGNALS
Period Obligations
11/18/1993-12/31/1995 FY94: \$65,000 TOTAL: \$65,000
Prin. Invest. NASA Tech. Officer CASE Category
M VERNET HQ/D E WICKLAND 33-Oceanography
R ITURRIAGA HQ/A C JANETOS

NAGW 3896 University of California - San Diego 2582
NAGW-3896/B SCRIPPS INST. OF OCEAN. 'GLOBAL SURF.
ULTRAVIOLET RADIATION CLIMATOL.' 36-MONTHS
Period Obligations
03/16/1994-03/31/1995 FY94: \$120,000 TOTAL: \$120,000
Prin. Invest. NASA Tech. Officer CASE Category
D LUBIN HQ/A KAYE 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 3932 University of California - San Diego 2583
LARGE AND SMALL SCALES IN GEOMAGNETIC FIELD MODELING
Period Obligations
04/08/1994-12/31/1994 FY94: \$73,563 TOTAL: \$73,563
Prin. Invest. NASA Tech. Officer CASE Category
C CONSTABLE HQ/M BALTUCK 32-Geological Sci

NAGW 3975 University of California - San Diego 2584
EVOLUTION OF WAVE SPECTRA AND ION DISTRIBUTIONS IN THE
MAGNETOSHEATH
Period Obligations
06/10/1994-04/30/1997 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest. NASA Tech. Officer CASE Category
M E MCKEAN HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 4018 University of California - San Diego 2585
THEORETICAL STUDIES OF MAGNETOSPHERIC TEARING
Period Obligations
06/01/1994-05/31/1997 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
K B QUEST HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 4073 University of California - San Diego 2586
TIME SERIES MID-IR IMAGING OF JUPITER DURING COMET 1993E
IMPACT
Period Obligations
07/15/1994-06/30/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
B JONES HQ/J H RAHE 11-Astronomy

NAS 5-30549 University of California - San Diego 2587
DEVELOPMENT OF IN-FLIGHT SOFTWARE AND DATA ANALYSIS
Period Obligations
06/06/1989-03/31/1995 FY94: \$0 TOTAL: \$550,000
Prin. Invest. NASA Tech. Officer CASE Category
W FILLIUS GSFC/J SCUDDER 22-Computer Science

NAS 5-30720 University of California - San Diego 2588
HIGH ENERGY X-RAY TIMING EXPERIMENT FOR XTE PROJECT
Period Obligations
11/01/1989-09/30/1997 FY94: \$2,403,377 TOTAL: \$24,565,361
Prin. Invest. NASA Tech. Officer CASE Category
R E ROTHSCHILD GSFC/W D DAVIS 11-Astronomy

NAS 5-32069 University of California - San Diego 2589
SCANNING AND POINTING DATA PRODUCTS
Period Obligations
11/02/1992-11/01/1994 FY94: \$0 TOTAL: \$74,500
Prin. Invest. NASA Tech. Officer CASE Category
D E GRUBER GSFC/D WEST 22-Computer Science

NAS 5-33019 University of California - San Diego 2590
GLRS SCIENCE TEAM MEMBER STUDY
Period Obligations
10/05/1989-12/31/1994 FY94: \$100,000 TOTAL: \$183,000
Prin. Invest. NASA Tech. Officer CASE Category
J B MINSTER GSFC/G SOFFEN 39-Env Sci, NEC

NAS 8-36081 University of California - San Diego 2591
R (SD)
Period Obligations
06/01/1984-04/30/1997 FY94: \$485,000 TOTAL: \$3,594,749
Prin. Invest. NASA Tech. Officer CASE Category
J L MATTESON MSFC/G J FISHMAN 11-Astronomy
MSFC/B J SCHRICK

NAS 9-16037 University of California - San Diego 2592
LIFE SCI FLT EXPER PULMONARY FUNCTION
Period Obligations
01/17/1980-12/01/1994 FY94: \$475,000 TOTAL: \$6,821,085
Prin. Invest. NASA Tech. Officer CASE Category
J B WEST JSC/C M BUNTIN 59-Life Sci, NEC

NAS 9-18764 University of California - San Diego 2593
STUDIES OF PULMONARY FUNCTION IN WEIGHTLESSNESS
Period Obligations
10/02/1992-01/31/1997 FY94: \$300,000 TOTAL: \$610,112
Prin. Invest. NASA Tech. Officer CASE Category
J B WEST JSC/V ELLERBE 59-Life Sci, NEC

NASW 4507 University of California - San Diego 2594
RESEARCH STUDY ENTITLED, THE RESEARCH DEVELOPMENT AND
TECHNOLOGY TRANSFER OF NEURAL NETWORK-BASED
Period Obligations
07/11/1990-07/10/1994 FY94: \$0 TOTAL: \$747,212
Prin. Invest. NASA Tech. Officer CASE Category
P M CHAU HQ/L D CAUDILL 49-Engr, NEC

NCA 2-791 University of California - San Diego 2595
AN INVESTIGATION OF THE MICROPHYSICAL PROPERTIES A ND
CLIMATIC IMPACT OF TROPICAL CIRRUS ANVILS
Period Obligations
02/12/1993-03/19/1995 FY94: \$39,969 TOTAL: \$79,402
Prin. Invest. NASA Tech. Officer CASE Category
V RAMANTHAN ARC/B TOON 31-Atmos Sci

NCC 2-556 University of California - San Diego 2596
QUANITATION OF DISUSE ALTERATIONS IN HUMAN MUSCULOETAL
TISSUE AS A MODEL FOR WEIGHTLESSNESS
Period Obligations
09/01/1988-10/31/1992 FY94: TOTAL: \$22,957
Prin. Invest. NASA Tech. Officer CASE Category
B J TUCKER ARC/A R HARGENS 56-Medical Sciences

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NCC 2-591 University of California - San Diego 2597
DISTRIBUTED COGNITION IN AVIATION

Period	Obligations	
03/10/1989-01/31/1995	FY94: \$140,000	TOTAL: \$858,742
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D A NORMAN	ARC/E A PALMER	62-Social Aspects
E L HUTCHINS	ARC/R R HOFSTRAND	

NCC 2-718 University of California - San Diego 2598
ELECTRON-BEAM FLUORESCENCE METHODS FOR HYPERSONIC FLOW DIAGNOSTICS

Period	Obligations	
06/27/1991-02/28/1993	FY94: \$0	TOTAL: \$212,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J CATTOLICA	ARC/R K BOGUE	13-Physics

NCC 2-792 University of California - San Diego 2599
A PILOT'S LANDING ASSISTANCE SYSTEM

Period	Obligations	
04/22/1993-03/31/1995	FY94: \$80,000	TOTAL: \$160,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R JAIN	ARC/B SRIDHAR	22-Computer Science
	ARC/V H CHENG	

NCC 2-820 University of California - San Diego 2600
MULTIDIMENSIONAL NUMERICAL MODELING OF CIRRUS CLOUDS

Period	Obligations	
08/16/1993-06/30/1995	FY94: \$0	TOTAL: \$53,920
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P J FLATAU	ARC/D L WESTPHAL	31-Atmos Sci
	ARC/O B TOON	

NCC 2-852 University of California - San Diego 2601
EXERCISE WITHIN LBNP TO PRODUCE ARTIFICIAL GRAVITY

Period	Obligations	
04/21/1994-09/30/1994	FY94: \$90,000	TOTAL: \$90,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A R HARGENS	ARC/C C WADE	56-Medical Sciences

NCC 3-173 University of California - San Diego 2602
NONLINEAR BEHAVIOR OF SPINNING PRETWISTED LAMINATE D COMPOSITE PLATES

Period	Obligations	
05/31/1990-09/30/1993	FY94: \$0	TOTAL: \$59,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J B KOSMATKA	LERC/O MEHMED	46-Mech Engr
	LERC/G STEFKO	

NCC 3-309 University of California - San Diego 2603
PASSIVE VIBRATION REDUCTION OF ADVANCED COMPOSITE PRETWISTED PLATES USING INTEGRAL DAMPING MATERIALS

Period	Obligations	
05/28/1993-05/09/1995	FY94: \$0	TOTAL: \$25,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J B KOSMATKA	LERC/O MEHMER	46-Mech Engr
	LERC/G STEFKO	

NCC 5-48 University of California - San Diego 2604
BIO-OPTICAL DATABASES IN SUPPORT OF SEAWIFS ALGORITHM DEVELOPMENT

Period	Obligations	
07/08/1992-12/31/1994	FY94: \$45,000	TOTAL: \$160,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B G MITCHELL	GSFC/C R MCCLAIN	33-Oceanography
	GSFC/S B HOOKER	

NGT 00-040-005 University of California - San Diego 2605
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM

Period	Obligations	
10/02/1989-01/31/1995	FY94: \$555,000	TOTAL: \$2,043,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J ARNOLD	HQ/E T SCHWARTZ	99-Multi-Discip

NGT 00-050-776 University of California - San Diego 2606
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/01/1991-06/30/1994	FY94: \$0	TOTAL: \$87,729
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B JONES	HQ/F C OWENS	13-Physics

NGT 00-050-854 University of California - San Diego 2607
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/04/1991-08/31/1994	FY94: \$0	TOTAL: \$63,334
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T HAYWARD	HQ/F C OWENS	33-Oceanography

NGT 00-050-935 University of California - San Diego 2608
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
05/21/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K QUEST	HQ/J K ALEXANDER	13-Physics

NGT 00-051-060 University of California - San Diego 2609
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
05/27/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D A MENDIS	HQ/D HOLLAND	13-Physics

NGT 00-051-274 University of California - San Diego 2610
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/14/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A M SCHNEIDER	JPL/C HIX	49-Engr, NEC

NGT 00-070-191 University of California - San Diego 2611
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
09/11/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J B KOSMATKA	HQ/F C OWENS	46-Mech Engr

NGT 00-070-224 University of California - San Diego 2612
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
05/13/1991-06/30/1993	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G RICLES	HQ/F C OWENS	46-Mech Engr

NGT 00-070-317 University of California - San Diego 2613
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
06/30/1993-06/30/1995	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A SCHNEIDER	HQ/D K RUSSELL	49-Engr, NEC

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 2-779 University of California - San Francisco 2614
NEURAL MECHANISMS BY WICH GRAVITATIONAL STIMULI AND
STRESS AFFECT THE SECRETION OF RENIN AND OTHER
Period Obligations
04/16/1992-01/31/1995 FY94: \$58,200 TOTAL: \$174,600
Prin. Invest. NASA Tech. Officer CASE Category
I A REID ARC/C E WADE 51-Biological Sci
L C KEIL

NAG 2-790 University of California - San Francisco 2615
AN INTEGRATED MODEL OF THE PRIMATE SKELETAL RESPON SE
TO SPACEFLIGHT
Period Obligations
06/24/1992-09/30/1993 FY94: \$0 TOTAL: \$45,980
Prin. Invest. NASA Tech. Officer CASE Category
C CANN ARC/C M WINGET 56-Medical Sciences

NAG 9-327 University of California - San Francisco 2616
THEORETICAL/PRACTICAL LIMITS/TEMOGRAPHY
Period Obligations
04/01/1988-02/01/1993 FY94: TOTAL: \$326,291
Prin. Invest. NASA Tech. Officer CASE Category
C E CANN JSC/V S SCHNEIDER 56-Medical Sciences

NAG 9-603 University of California - San Francisco 2617
ADVANCING METHODS OF BONE MINERAL DENSITY AND
STRUCTURE ASSESSMENT
Period Obligations
06/01/1992-06/01/1995 FY94: \$80,000 TOTAL: \$238,800
Prin. Invest. NASA Tech. Officer CASE Category
H K GENANT JSC/V S SCHNEIDER 56-Medical Sciences

NAG 9-689 University of California - San Francisco 2618
EFFECTS OF DISUSE AND RELOADING ON SUBCHONDRAL
TRABECULAR BONE IN THE ADULT GREYHOUND DOG
Period Obligations
05/12/1993-12/01/1994 FY94: \$161,948 TOTAL: \$161,948
Prin. Invest. NASA Tech. Officer CASE Category
N E LANE JSC/L TAGGART 56-Medical Sciences

NAGW 1244 University of California - San Francisco 2619
MECHANISM OF CONTROL OF BONE GROWTH BY
PROSTAGLANDINS
Period Obligations
12/28/1987-12/31/1995 FY94: \$65,000 TOTAL: \$556,729
Prin. Invest. NASA Tech. Officer CASE Category
M H FULFORD HQ/T W HALSTEAD 51-Biological Sci

NAS 9-16227 University of California - San Francisco 2620
LIFE SCI EXPER/MINERAL LOSS/EXCRETION
Period Obligations
10/21/1980-01/01/1995 FY94: \$194,000 TOTAL: \$1,561,697
Prin. Invest. NASA Tech. Officer CASE Category
C D ARMAUD JSC/K E NEWKIRK 59-Life Sci, NEC

NAS 9-18769 University of California - San Francisco 2621
SLS-3 FLIGHT EXPERIMENT
Period Obligations
10/20/1992-03/31/1997 FY94: \$80,000 TOTAL: \$210,814
Prin. Invest. NASA Tech. Officer CASE Category
C CANN JSC/V ELLERBE 51-Biological Sci

NCA 2-726 University of California - San Francisco 2622
TEMPERATURE DEPENDENCE OF THE HYDROPHOBIE EFFECT
Period Obligations
07/06/1992-09/30/1992 FY94: TOTAL: \$20,779
Prin. Invest. NASA Tech. Officer CASE Category
A POHORILLE ARC/S CHANG 12-Chemistry

NCA 2-792 University of California - San Francisco 2623
PARALLEL ALGORITHMS FOR THE SIMULATION OF PROTOBIO
LOGICAL MEMBRANES
Period Obligations
02/16/1993-06/30/1994 FY94: \$0 TOTAL: \$39,996
Prin. Invest. NASA Tech. Officer CASE Category
A POHORILLE ARC/S CHANG 12-Chemistry

NCC 2-589 University of California - San Francisco 2624
GRAVITY AND SKELETAL GROWTH
Period Obligations
03/15/1989-10/31/1994 FY94: \$341,055 TOTAL: \$1,424,674
Prin. Invest. NASA Tech. Officer CASE Category
E M HOLTEN ARC/S B ARNAUD 51-Biological Sci

NCC 2-597 University of California - San Francisco 2625
BONE CALCIUM AND SPACEFLIGHT
Period Obligations
05/15/1989-09/30/1994 FY94: \$149,366 TOTAL: \$236,711
Prin. Invest. NASA Tech. Officer CASE Category
C E CANN ARC/E M HOLTEN 51-Biological Sci

NCC 2-764 University of California - San Francisco 2626
FLUDROCORTISONE: ROLE IN CENTRAL REGULATION OF FL UID
BALANCE
Period Obligations
06/17/1992-03/31/1995 FY94: \$75,000 TOTAL: \$251,073
Prin. Invest. NASA Tech. Officer CASE Category
M F DALLMAN ARC/J VERNIKOS 56-Medical Sciences

NCC 2-772 University of California - San Francisco 2627
MOLECULAR SELF-ORGANIZATION AND THE ORIGIN OF LIFE:
FORMATION AND FUNCTIONS OF PROTOCELLS
Period Obligations
10/16/1992-09/30/1995 FY94: \$104,570 TOTAL: \$269,551
Prin. Invest. NASA Tech. Officer CASE Category
A POHORILLE ARC/S CHANG 12-Chemistry

NCC 2-846 University of California - San Francisco 2628
EFFECTS OF HYPOGRAVITY ON OSTEOBLAST DIFFERENTIATI ON
Period Obligations
03/22/1994-12/31/1994 FY94: \$37,943 TOTAL: \$37,943
Prin. Invest. NASA Tech. Officer CASE Category
R K GLOBUS ARC/E M HOLTEN 51-Biological Sci

NCC 2-5073 University of California - San Francisco 2629
PARALLEL ALGORITHMS FOR THE SIMULATION OF PROTOBIO
LOGICAL MEMBRANES
Period Obligations
06/30/1994-02/28/1995 FY94: \$39,996 TOTAL: \$39,996
Prin. Invest. NASA Tech. Officer CASE Category
A POHORILLE ARC/S CHANG 12-Chemistry

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NAG 1-1376 University of California - Santa Barbara 2630
 STRUCTURAL QUALIFICATION OF COMPOSITE AIRFRAMES

Period	Obligations	
02/13/1992-01/26/1995	FY94: \$65,490	TOTAL: \$214,505
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K T KEDWARD	LARC/J H STARNES	41-Aero Engr
	LARC/M J SHUART	

NAG 2-930 University of California - Santa Barbara 2631
 MECHANICAL PROPERTIES OF AEROGELS

Period	Obligations	
09/26/1994-06/30/1995	FY94: \$50,243	TOTAL: \$50,243
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F MILESTEIN	ARC/D J RASKY	47-Materials Engr

NAG 5-917 University of California - Santa Barbara 2632
 SURFACE CLIMATE PARAMETERS W/SATELLITE AND TERRAIN DATA FIFE

Period	Obligations	
06/01/1987-06/30/1994	FY94: \$0	TOTAL: \$476,893
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J DOZIER	GSFC/B CHOUDHURY	39-Env Sci, NEC
F DAVIS	GSFC/F HALL	

NAG 5-2485 University of California - Santa Barbara 2633
 DEVELOPMENT OF A GENERAL-PURPOSE RADIATIVE TRANSFER MODEL ON PARALLEL COMPUTING ARCHITECTURES

Period	Obligations	
02/04/1994-02/14/1995	FY94: \$30,000	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
Z WAN	GSFC/J R FISCHER	22-Computer Science

NAG 8-929 University of California - Santa Barbara 2634
 R/S SUPPORT OF THE WETNET PROGRAM

Period	Obligations	
07/27/1992-09/30/1994	FY94: \$78,650	TOTAL: \$153,646
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J E ESTES	MSFC/M GOODMAN	39-Env Sci, NEC

NAGW 290 University of California - Santa Barbara 2635
 SHIP AND SATELLITE BIO-OPTICAL RESEARCH IN THE CALIFORNIA BIGHT

Period	Obligations	
02/01/1982-01/31/1995	FY94: \$252,000	TOTAL: \$3,346,840
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R C SMITH	HQ/M R LEWIS	33-Oceanography
K S BAKER	HQ/W S WILSON	

NAGW 1062 University of California - Santa Barbara 2636
 ADVANCED RADIOMETER DEVELOPMENT

Period	Obligations	
07/01/1987-09/30/1994	FY94: \$170,000	TOTAL: \$963,205
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P M LUBIN	HQ/F C GILLETT	11-Astronomy
	HQ/E J WEILER	

NAGW 1743 University of California - Santa Barbara 2637
 REMOTE SENSING INFORMATION SCIENCES RESEARCH GROUP

Period	Obligations	
05/16/1989-04/30/1995	FY94: \$0	TOTAL: \$4,602,441
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J E ESTES	HQ/A J TUYAHOV	99-Multi-Discip
T R SMITH		
J L STAR		

NAGW 1948 University of California - Santa Barbara 2638
 NONMARINE STROMATOLITES AND THE SEARCH FOR PAST LIFE ON MARS

Period	Obligations	
05/01/1990-11/30/1993	FY94: \$5,702	TOTAL: \$213,163
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S M AWRAMIK	HQ/J D RUMMEL	32-Geological Sci

NAGW 2027 University of California - Santa Barbara 2639
 INTEGRABLE, FIELD-INDUCED GUIDES (FIGS) FOR THE MODULATION AND SWITCHING OF LIGHTWAVES

Period	Obligations	
04/27/1990-08/31/1993	FY94: \$0	TOTAL: \$393,537
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L A COLDREN	HQ/G I JOHNSTON	19-Phys Sci, NEC

NAGW 2061 University of California - Santa Barbara 2640
 SOLAR SYSTEM PHYSICS

Period	Obligations	
04/10/1990-09/30/1994	FY94: \$86,000	TOTAL: \$369,200
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S J PEALE	HQ/T A MAXWELL	13-Physics

NAGW 2188 University of California - Santa Barbara 2641
 THE GAMMA-RAY ARC-MINUTE TELESCOPE IMAGING SYSTEM (GRATIS)

Period	Obligations	
08/09/1990-03/31/1994	FY94: \$0	TOTAL: \$270,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P LUBIN	HQ/L KALNZIENSKI	13-Physics

NAGW 2458 University of California - Santa Barbara 2642
 REMOTE SENSING OF HEAT AND FRESH WATER EXCHANGE IN THE TROPICAL PACIFIC

Period	Obligations	
04/11/1991-09/30/1992	FY94: \$0	TOTAL: \$185,594
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C GAUTIER	HQ/J C DODGE	39-Env Sci, NEC
	HQ/D M BUTLER	

NAGW 2460 University of California - Santa Barbara 2643
 GLOBAL AIR-SEA ENERGY AND WATER EXCHANGES: A SCIENTIFIC CONTRIBUTION TO WETNET

Period	Obligations	
04/12/1991-09/30/1994	FY94: \$0	TOTAL: \$549,810
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C GAUTIER	HQ/J C DODGE	31-Atmos Sci

NAGW 2602 University of California - Santa Barbara 2644
 HYDROLOGY, HYDROCHEMICAL MODELING, AND REMOTE SENSING IN SEASONALLY SNOW-COVERED ALPINE DRAINAGE

Period	Obligations	
08/06/1991-12/31/1994	FY94: \$945,048	TOTAL: \$3,073,048
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J DOZIER	HQ/G ASRAR	39-Env Sci, NEC
	HQ/W S WILSON	

NAGW 2724 University of California - Santa Barbara 2645
 BIOGEOCHEMISTRY OF DISSOLVED GASES IN THE PANTANAL WETLAND OF BRAZIL

Period	Obligations	
09/10/1991-08/31/1994	FY94: \$130,000	TOTAL: \$360,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J MELACK	HQ/A C JANETOS	39-Env Sci, NEC
	HQ/D E WICKLAND	

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NAGW 2737 University of California - Santa Barbara 2646

THE DEVELOPMENT OF PROTOTYPE SOFTWARE, SYSTEM FOR
EDUCATION AND RESEARCH ON EARTH'S ATMOSPHERE

Period	Obligations	
09/24/1991-11/30/1992	FY94:	TOTAL: \$58,958
Prin. Invest.	NASA Tech. Officer	CASE Category
C H GAUTIER	HQ/R A SCHIFFER	31-Atmos Sci
	HQ/R T WATSON	

NAGW 2840 University of California - Santa Barbara 2647

NONLINEAR DROP DYNAMICS AND CHAOTIC PHENOMENA

Period	Obligations	
01/17/1992-11/30/1994	FY94: \$78,000	TOTAL: \$234,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L G LEAL	HQ/B M CARPENTER	13-Physics

NAGW 3145 University of California - Santa Barbara 2648

SOLAR RADIATION PENETRATION, MODELING GLOBAL OCEAN
CLIMATE AND SATELLITE OCEAN COLOR IMAGERY

Period	Obligations	
08/11/1992-07/31/1995	FY94: \$209,127	TOTAL: \$441,300
Prin. Invest.	NASA Tech. Officer	CASE Category
D A SIEGEL	HQ/R E MURPHY	33-Oceanography
	HQ/J A KAYE	

NAGW 3180 University of California - Santa Barbara 2649

NAGW-3180/UNIV CA @ SANTA BARBARA/GLOBAL SURFACE SOLAR
IRRADIANCE ESTIMATIONS FROM SATELLITE DATA

Period	Obligations	
09/23/1992-07/31/1995	FY94: \$130,000	TOTAL: \$280,000
Prin. Invest.	NASA Tech. Officer	CASE Category
C GAUTIER	HQ/J C DODGE	31-Atmos Sci

NAGW 3245 University of California - Santa Barbara 2650

THE VCSB REMOTE ACCESS ASTRONOMY PROJECT

Period	Obligations	
11/16/1992-07/31/1993	FY94: \$0	TOTAL: \$5,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P M LUBIN	HQ/L LAPIANA	11-Astronomy
	HQ/G P NEWTON	

NAGW 3325 University of California - Santa Barbara 2651

THE SUPERFLUID TRANSITION OF 4HE IN THE PRESENCE OF A
HEAT CURRENT

Period	Obligations	
12/31/1992-12/31/1995	FY94: \$130,000	TOTAL: \$260,000
Prin. Invest.	NASA Tech. Officer	CASE Category
G AHLERS	HQ/M C LEE	13-Physics

NAGW 3350 University of California - Santa Barbara 2652

GEOPHYSICAL MODELING AND ANALYSIS OF SATELLITE ALT
IMETRY GRAVITY AND MAGNETIC DATA

Period	Obligations	
01/15/1993-12/31/1995	FY94: \$99,973	TOTAL: \$198,919
Prin. Invest.	NASA Tech. Officer	CASE Category
P M LUBIN	HQ/R E MURPHY	13-Physics
A J ANDERSON	HQ/B CHAO	

NAGW 3888 University of California - Santa Barbara 2653

UNIV CALIF SANTA BARBARA; IMPLEMENTING AND APPLYING A
MODELING AND DATABASE SYSTEM IN SUPPORT OF EOS

Period	Obligations	
03/03/1994-04/30/1995	FY94: \$269,593	TOTAL: \$269,593
Prin. Invest.	NASA Tech. Officer	CASE Category
T R SMITH	HQ/G H MUCKLOW	22-Computer Science
	HQ/H BREDECAMP	

NAGW 3951 University of California - Santa Barbara 2654

FULLY AUTOMATED REGISTRATION AND COMPOSITE GENERAT
IONS

Period	Obligations	
04/25/1994-12/31/1996	FY94: \$113,833	TOTAL: \$113,833
Prin. Invest.	NASA Tech. Officer	CASE Category
	HQ/G H MUCKLOW	22-Computer Science
	HQ/J H BREDECAMP	

NAGW 4051 University of California - Santa Barbara 2655

CRYOGENIC LOW NOISE MICROWAVE RECEIVER DEVELOPMENT
FOR COSMIC BACKGROUND RADIATION MEASUREMENTS

Period	Obligations	
06/22/1994-02/28/1995	FY94: \$80,000	TOTAL: \$80,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P M LUBIN	HQ/L J CAROFF	11-Astronomy

NAS 5-31370 University of California - Santa Barbara 2656

EOS INVESTIGATION

Period	Obligations	
12/23/1991-12/14/2001	FY94: \$334,000	TOTAL: \$723,902
Prin. Invest.	NASA Tech. Officer	CASE Category
Z WAN	GSFC/H OSEROFF	33-Oceanography

NAS 5-31374 University of California - Santa Barbara 2657

EOS INVESTIGATION - ATMOSPHERIC INFRARED SOUNDER (AIRS)
TEAM MEMBER INVESTIGATION

Period	Obligations	
03/04/1992-12/14/2001	FY94: \$232,000	TOTAL: \$362,000
Prin. Invest.	NASA Tech. Officer	CASE Category
C GAUTIER	GSFC/E KRIENS	39-Env Sci, NEC

NAS 5-31710 University of California - Santa Barbara 2658

EOS INVESTIGATION/HIRIS TEAM MEMBER

Period	Obligations	
09/17/1992-12/14/2001	FY94: \$10,000	TOTAL: \$138,850
Prin. Invest.	NASA Tech. Officer	CASE Category
D DOZLER	GSFC/T BRAKKE	32-Geological Sci

NAS 5-31713 University of California - Santa Barbara 2659

EOS INVESTIGATION/HIRIS TEAM MEMBER

Period	Obligations	
02/25/1992-12/14/2001	FY94: \$50,000	TOTAL: \$337,849
Prin. Invest.	NASA Tech. Officer	CASE Category
J M MELACK	GSFC/T BRAKE	31-Atmos Sci

NCA 2-668 University of California - Santa Barbara 2660

HIGH RESOLUTION IMAGE FORMATION TECHNIQUES FOR 3-D
IMENSIONAL TARGET REFLECTIVITY PROFILES

Period	Obligations	
11/04/1991-11/14/1993	FY94: \$0	TOTAL: \$30,000
Prin. Invest.	NASA Tech. Officer	CASE Category
H LEE	ARC/A WOO	45-Elec Engr

NCC 2-63 University of California - Santa Barbara 2661

INVESTIGATE EFFECT OF SURFACE IMPURITIES ADSORPTION
KINETICS OF HYDROGEN CHEMISORBED IRON

Period	Obligations	
04/01/1980-12/31/1994	FY94: \$63,985	TOTAL: \$1,453,317
Prin. Invest.	NASA Tech. Officer	CASE Category
M R SHANABARGER	ARC/H G NELSON	47-Materials Engr

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCC 5-49 University of California - Santa Barbara 2662
AUGMENTATION OF THE BERMUDA BIO-OPTICS PROGRAM IN
SUPPORT OF THE SEAWIFS SATELLITE MISSION

Period	Obligations	
07/22/1992-07/31/1995	FY94: \$120,000	TOTAL: \$180,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D A SIEGEL	GSFC/C R MCCLAIN	33-Oceanography
	GSFC/S B HOOKER	

NGT 00-030-013 University of California - Santa Barbara 2663
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
11/01/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S K HAMILTON	HQ/G ASRAR	39-Env Sci, NEC

NGT 00-030-138 University of California - Santa Barbara 2664
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/21/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A HICKE	HQ/G ASRAR	31-Atmos Sci
	HQ/M BUTLER	

NGT 00-030-141 University of California - Santa Barbara 2665
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/23/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S A GARVER	HQ/G ASRAR	33-Oceanography
	HQ/D M BUTLER	

NGT 00-030-145 University of California - Santa Barbara 2666
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/23/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A GERSHUNOV	HQ/G ASRAR	39-Env Sci, NEC
	HQ/D M BUTLER	

NGT 00-030-159 University of California - Santa Barbara 2667
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/30/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
Y CHEN	HQ/G ASRAR	22-Computer Science
	HQ/D M BUTLER	

NGT 00-030-204 University of California - Santa Barbara 2668
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
08/26/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H COUCLELIS	HQ/G ASRAR	39-Env Sci, NEC
	HQ/D M BUTLER	

NGT 00-050-780 University of California - Santa Barbara 2669
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/10/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P M LUBIN	HQ/D HOLLAND	13-Physics

NGT 00-051-264 University of California - Santa Barbara 2670
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/14/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G AHLERS	HQ/G LESANE	13-Physics

NGT 00-051-342 University of California - Santa Barbara 2671
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/08/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L G LEAL	HQ/G A LESANE	43-Chem Engr

NAG 2-813 University of California - Santa Cruz 2672
ARE THER HIDDEN SUPERNOVAE?

Period	Obligations	
12/15/1992-09/30/1994	FY94: \$18,661	TOTAL: \$300,861
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D M RANK	ARC/C D LAUGHLIN	11-Astronomy
J D BREGMAN	ARC/C M GILLESPIE	

NAG 5-1767 University of California - Santa Cruz 2673
THE COEVALITY OF THE HR 1614 MOVING GROUP

Period	Obligations	
09/10/1991-09/14/1993	FY94: \$0	TOTAL: \$14,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G H SMITH	GSFC/D WEST	11-Astronomy

NAG 5-2073 University of California - Santa Cruz 2674
HYDRODYNAMICS OF SUPERNOVAE AND IMPLICATIONS FOR G
AMMA-RAY ASTROPHYSICS

Period	Obligations	
08/25/1992-08/31/1995	FY94: \$53,000	TOTAL: \$153,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HERANT	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2262 University of California - Santa Cruz 2675
CROSS-CORRELATION OF DIFFUSE X-RAY BACKGROUND WITH RICH
CLUSTER FLUX

Period	Obligations	
05/04/1993-05/14/1994	FY94: \$0	TOTAL: \$7,339
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J R PRIMACK	GSFC/K M JAHODA	11-Astronomy
M GROSS		

NAG 8-932 University of California - Santa Cruz 2676
SCIENCE EVALUATION AND CONCEPTS FOR UV-IR SPACE
TELESCOPES

Period	Obligations	
08/06/1992-08/23/1995	FY94: \$0	TOTAL: \$15,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G D ILLINGWORTH	MSFC/M E'NEIN	11-Astronomy

NAGW 590 University of California - Santa Cruz 2677
STRUCTURE OF SATURN'S RING: COLLISION PROPERTIES OF
WATER-ICE PARTICLES

Period	Obligations	
02/01/1984-12/31/1994	FY94: \$0	TOTAL: \$339,780
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F BRIDGES	HQ/J R UNDERWOOD	32-Geological Sci
D N LIN	HQ/J M BOYCE	

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAGW 2422 University of California - Santa Cruz 2678 STRUCTURE AND EVOLUTION OF ASTROPHYSICAL DISKS

Period	Obligations	
05/24/1991-12/31/1994	FY94: \$90,870	TOTAL: \$628,162
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L E HERNQUIST	HQ/G S KUTTER	11-Astronomy
	HQ/G R RIEGLER	

NAGW 2525 University of California - Santa Cruz 2679 RADIATION TRANSPORT IN SUPERNOVAE AND RELATED PHENOMENA

Period	Obligations	
05/29/1991-12/31/1994	FY94: \$28,258	TOTAL: \$327,382
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S E WOOSLEY	HQ/G S KUTTER	11-Astronomy
	HQ/G R RIEGLER	

NAGW 2965 University of California - Santa Cruz 2680 SUMMER WORKSHOP IN ASTRONOMY AND ASTROPHYSICS ON THE GLOBULAR CLUSTER - GALAXY CONNECTION

Period	Obligations	
03/11/1992-12/31/1992	FY94:	TOTAL: \$24,862
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J P BRODIE	HQ/L J CAROFF	11-Astronomy

NAGW 3105 University of California - Santa Cruz 2681 COSMOLOGICAL IMPLICATIONS OF THE EFFECTS OF X-RAY CLUSTERS ON THE COSMIC MICROWAVE

Period	Obligations	
06/16/1992-06/30/1995	FY94: \$18,000	TOTAL: \$36,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G R BLUMENTHAL	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

NAGW 3408 University of California - Santa Cruz 2682 PROTOPLANETARY FORMATION AND THE FU ORIONIS OUTBURST

Period	Obligations	
03/01/1993-02/28/1994	FY94: \$0	TOTAL: \$45,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P H BODENHEIMER	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 3599 University of California - Santa Cruz 2683 WAVE PROPAGATION IN THE PRIMORDIAL SOLAR NEBULA

Period	Obligations	
06/17/1993-05/31/1994	FY94: \$0	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D LIN	HQ/J A NUTH III	19-Phys Sci, NEC

NAGW 3988 University of California - Santa Cruz 2684 DYNAMICAL EVOLUTION AND THE GROWTH OF PLANETISMALS

Period	Obligations	
05/04/1994-05/31/1995	FY94: \$32,400	TOTAL: \$32,400
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D LIN	HQ/P ROGERS	11-Astronomy

NAGW 4037 University of California - Santa Cruz 2685 ISO DEEP SURVEY KEY PROJECT

Period	Obligations	
06/03/1994-04/30/1995	FY94: \$35,000	TOTAL: \$35,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D KOO	HQ/CAROFF	11-Astronomy

NCA 2-650 University of California - Santa Cruz 2686 ORIGIN OF LIFE EXPLORATION OF WATER/AIR INTERFACE AS A REACTION

Period	Obligations	
08/23/1991-08/31/1993	FY94: \$0	TOTAL: \$72,010
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A KANAVARIOTI	ARC/S CHANG	12-Chemistry

NCA 2-746 University of California - Santa Cruz 2687 DYNAMICAL STUDIES OF THE OUTER SOLAR SYSTEM

Period	Obligations	
08/12/1992-08/31/1994	FY94: \$0	TOTAL: \$80,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P BODENHEIMER	ARC/J N CUZZI	11-Astronomy

NCA 2-750 University of California - Santa Cruz 2688 GAS AND DISSIPATION IN ASTROPHYSICAL DISKS

Period	Obligations	
09/09/1992-09/16/1994	FY94:	TOTAL: \$39,624
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L HERNQUIST	ARC/B SMITH	11-Astronomy
T STEIMAN-CAMERON	ARC/D HOLLENBACH	

NCA 2-777 University of California - Santa Cruz 2689 IMAGE PROCESSING TECHNIQUES FOR LARGE FORMAT IR CAMERAS

Period	Obligations	
02/04/1993-01/14/1994	FY94: \$0	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D M RANK	ARC/J D BREGMAN	11-Astronomy

NCA 2-803 University of California - Santa Cruz 2690 COMPOSITIONAL PROFILE OF THE GIANT PLANETS

Period	Obligations	
04/02/1993-03/31/1994	FY94: \$0	TOTAL: \$22,990
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P H BODENHEIMER	ARC/J B POLLACK	11-Astronomy

NCC 2-534 University of California - Santa Cruz 2691 TOWARDS A SELF REPLICATING CHEMICAL SYSTEM BASED ON CYTIDYLIC AND GUANYLIC ACIDS

Period	Obligations	
01/15/1988-01/14/1995	FY94: \$99,840	TOTAL: \$505,817
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A KANAVARIOTI	ARC/S CHANG	12-Chemistry
C F BERNASCONI		

NCC 2-649 University of California - Santa Cruz 2692 THEORETICAL AND OBSERVATIONAL STUDIES OF STAR AND PLANET FORMATION AND PRECURSOR SCIENCE FOR SIRT

Period	Obligations	
10/16/1989-12/31/1994	FY94: \$283,503	TOTAL: \$1,283,685
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P H BODENHEIMER	ARC/D J HOLLENBACH	11-Astronomy
	ARC/M W WERNER	

NCC 2-717 University of California - Santa Cruz 2693 VOLUME VISUALIZATION FOR COMPUTATIONAL FLUID DYNAMICS

Period	Obligations	
06/05/1991-03/14/1995	FY94: \$50,000	TOTAL: \$260,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J WILHELMS	ARC/A VAZIRI	22-Computer Science
	ARC/J HULQUIST	

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NCC 2-744 University of California - Santa Cruz 2694
DOES PLUTO HAVE A HAZE LAYER?
Period *Obligations*
12/20/1991-11/30/1993 FY94: \$0 TOTAL: \$65,281
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M RANK ARC/E W DUNHAM 11-Astronomy

NCC 2-814 University of California - Santa Cruz 2695
VERIDICAL AND EFFICIENT PORTRAYAL OF DEPTH THROUGH M
OTION ON FLAT DISPLAYS
Period *Obligations*
07/22/1993-09/30/1994 FY94: \$13,663 TOTAL: \$25,663
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B BRIDGEMAN ARC/M K KAISER 69-Psych, NEC

NCC 2-5005 University of California - Santa Cruz 2696
GAS AND DISSIPATION IN ASTROPHYSICAL DISKS
Period *Obligations*
10/13/1993-09/30/1994 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L HERNQUIST ARC/B SMITH 11-Astronomy
T S CAMERON ARC/D HOLLENBACH

NCC 2-5013 University of California - Santa Cruz 2697
REDUCTION TECHNIQUES FOR FIELD ROTATED IR IMAGES
Period *Obligations*
11/24/1993-01/14/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D R RANK ARC/J BREGMAN 11-Astronomy

NCC 2-5044 University of California - Santa Cruz 2698
THE EFFECT OF THE QUATION OF STAT EON THE EVOLUTIO N
OF THE GIANT PLANETS
Period *Obligations*
04/11/1994-03/31/1995 FY94: \$25,740 TOTAL: \$25,740
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P BODENHEIMER ARC/J B POLLACK 11-Astronomy

NGT 00-050-665 University of California - Santa Cruz 2699
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/07/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D LIN HQ/F C OWENS 11-Astronomy

NGT 00-050-855 University of California - Santa Cruz 2700
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/16/1991-02/28/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L HERNQUIST HQ/F C OWENS 11-Astronomy

NGT 00-051-220 University of California - Santa Cruz 2701
GRAD STUDENT RESEARCHERS PROGRAM
Period *Obligations*
04/25/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R S ANDERSON HQ/A NOVOTNY 32-Geological Sci

NGT 00-070-337 University of California - Santa Cruz 2702
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/30/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R HUGHEY HQ/D K RUSSELL 49-Engr, NEC

NGT 00-090-178 University of California - Santa Cruz 2703
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E SLATER HQ/D K RUSSELL 99-Multi-Discip

NAG 8-168 University of San Francisco 2704
DATA ANALYSIS PLAN FOR LDEF EXPERIMENT
Period *Obligations*
07/26/1990-11/24/1994 FY94: \$0 TOTAL: \$297,693
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E V BENTON MSFC/T A PARNELL 13-Physics

NAG 8-282 University of San Francisco 2705
LDEF EXPERIMENT
Period *Obligations*
02/02/1993-02/01/1995 FY94: \$60,446 TOTAL: \$120,446
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E V BENTON MSFC/T A PARNELL 13-Physics
MSFC/J W WATTS

NAG 8-789 University of San Francisco 2706
RADIATION ENVIRONMENT FOR SPACE STATION
Period *Obligations*
08/24/1989-02/20/1993 FY94: \$0 TOTAL: \$136,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E V BENTON MSFC/T A PARNELL 19-Phys Sci, NEC
MSFC/J W WATTS

NAG 9-235 University of San Francisco 2707
HIGH-LET SPACE RADIATION DOSIMETRY/ASTRO
Period *Obligations*
06/01/1987-05/01/1995 FY94: \$0 TOTAL: \$1,187,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E V BENTON JSC/D S NACHTWEY 13-Physics

NAG 9-727 University of San Francisco 2708
PASSIVE SPACE RADIATION DOSIMETRY FOR STS-60
Period *Obligations*
05/10/1994-04/01/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E V BENTON JSC/G BADHWAR 11-Astronomy

NAGW 4154 University of San Francisco 2709
HIGH LET PASSIV SPACE
Period *Obligations*
09/21/1994-07/31/1995 FY94: \$200,000 TOTAL: \$200,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E U BENTON HQ/F SULZMAN 56-Medical Sciences

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NAG 1-1096 University of Southern California 2710
CONTROL OF JET NOISE— FDP
Period *Obligations*
02/01/1990-06/30/1993 FY94: \$1 TOTAL: \$275,251
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S SHRECK LARC/J M SEINER 41-Aero Engr
LARC/M K PONTON

NAG 2-146 University of Southern California 2711
PIONEER 10/11 DATA ANALYSIS OF THE ULTRAVIOLET
PHOTOMETRY EXPERIMENT
Period *Obligations*
10/01/1981-01/31/1995 FY94: \$251,470 TOTAL: \$2,492,033
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D JUDGE ARC/L E LASHER 13-Physics
ARC/J R PHILLIPS

NAG 2-864 University of Southern California 2712
COORDINATION OF EVOLVING CONVENTIONS ENABLING SHAR ING
OF KNOWLEDGE
Period *Obligations*
08/06/1993-12/31/1994 FY94: \$200,000 TOTAL: \$705,458
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R NECHES ARC/P E FRIEDLAND 22-Computer Science

NAG 3-1523 University of Southern California 2713
STUDIES OF PREMIXED LAMINAR AND TURBULENT FLAMES A T
MICROGRAVITY
Period *Obligations*
09/09/1993-01/08/1995 FY94: \$223,002 TOTAL: \$279,002
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P D RONNEY LERC/K J WEILAND 46-Mech Engr

NAG 3-1611 University of Southern California 2714
FLOW AND AMBIENT ATMOSPHERE EFFECTS ON FLAME SPREA D
AT MICROGRAVITY
Period *Obligations*
06/01/1994-05/31/1995 FY94: \$67,346 TOTAL: \$67,346
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P D RONNEY LERC/S C OLSON 46-Mech Engr
LERC/H D ROSS

NAG 3-1615 University of Southern California 2715
AERODYNAMICS, UNSTEADY, KINETIC AND HEAT LOSS EFFE FTS
ON THE DYNAMICS AND STRUCTURE OF WEAKLY- BURNIN
Period *Obligations*
06/15/1994-06/14/1995 FY94: \$76,673 TOTAL: \$76,673
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F N EGOLFOPOULOS LERC/H D ROSS 46-Mech Engr

NAG 3-1619 University of Southern California 2716
INTERACTION OF HELE-SHAW FLOWS WITH DIRECTIONAL SO
LIDIFICATION: NUMERICAL INVESTIGATION OF NONLINEA
Period *Obligations*
06/16/1994-06/15/1995 FY94: \$49,019 TOTAL: \$49,019
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E MEIBURG LERC/A CHAIT 47-Materials Engr
LERC/M ZLATKOWSKI

NAG 3-1621 University of Southern California 2717
THE INTRACTIVE DYNAMICS OF CONVECTION, LOW, AND DI
RECTIONAL SOLIDIFICATION
Period *Obligations*
06/16/1994-06/15/1995 FY94: \$47,339 TOTAL: \$47,339
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T MAXWORTHY LERC/A CHAIT 47-Materials Engr
LERC/M ZLATKOWSKI

NAG 3-1653 University of Southern California 2718
STUDIES OF RADIATION DRIVEN AND BUOYANCY DRIVEN FLUID
FLOWS AND TRANSPORT
Period *Obligations*
07/19/1994-07/18/1995 FY94: \$49,000 TOTAL: \$49,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P D RONNEY LERC/B S SINGH 46-Mech Engr

NAG 5-1296 University of Southern California 2719
DETERMINATION OF THE EFFECTIVE TEMPERATURE SURFACE
GRAVITIES
Period *Obligations*
09/15/1989-02/14/1994 FY94: \$0 TOTAL: \$200,830
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J PETERS GSFC/D WEST 11-Astronomy

NAG 5-2219 University of Southern California 2720
IMPLEMENTATION OF HELIOSEISMIC DATA REDUCTION AND
DIAGNOSTIC TECHNIQUES ON MASSIVELY PARALLEL ARCH...
Period *Obligations*
02/25/1993-11/30/1994 FY94: \$10,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E RHODES GSFC/J FISCHER 11-Astronomy

NAG 5-2292 University of Southern California 2721
A SURVEY OF EUV EMISSION IN NEARBY BE STARS
Period *Obligations*
06/11/1993-10/31/1994 FY94: \$0 TOTAL: \$31,244
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J PETERS GSFC/R OLIVERSON 11-Astronomy

NAG 5-2313 University of Southern California 2722
LONG-TERM FUV FLUX AND WIND VARIABILITY IN BE STAR S AND
MULTIWAVELENGTH OBS. AT EQUATOR-ON
Period *Obligations*
07/12/1993-07/14/1995 FY94: \$0 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J PETERS GSFC/R OLIVERSEN 11-Astronomy

NAG 5-5018 University of Southern California 2723
ROCKET UNDERFLIGHTS FOR SOHO CROSS-CALIBRATION AND
SOLAR ATMOSPHERE INVESTIGATIONS
Period *Obligations*
02/28/1994-02/28/1995 FY94: \$234,262 TOTAL: \$234,262
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J JUDGE GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAGW 13 University of Southern California 2724
THREE DIMENSIONAL OBSERVATIONAL STUDY OF SOLAR 5 MINUTE
OSCILLATIONS
Period *Obligations*
01/01/1980-02/28/1997 FY94: \$211,500 TOTAL: \$2,195,246
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E J RHODES HQ/J D BOHLIN 13-Physics
HQ/S KANE

NAGW 163 University of Southern California 2725
3 MONTH NCE UNDER NEW CLAUSE
Period *Obligations*
04/01/1981-10/31/1994 FY94: \$65,789 TOTAL: \$683,735
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L JUDGE HQ/K FOX 31-Atmos Sci
L BROADFOOT HQ/W L QUAIDE
J KUNC

NASA'S UNIVERSITY PROGRAM CALIFORNIA (Continued)

NAGW 1061 University of Southern California 2726
GRADUATE RESEARCH AND TRAINING IN HYPERSONICS
Period *Obligations*
03/15/1987-10/31/1993 FY94: \$0 TOTAL: \$1,004,998
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E KAPLAN HQ/S M WANDER 19-Phys Sci, NEC
HQ/R A GRAVES

NAGW 1924 University of Southern California 2727
PHOTON ABSORPTION AND EMISSION STUDIES OF ATMOSPHERIC GASES
Period *Obligations*
02/06/1990-09/30/1994 FY94: \$97,143 TOTAL: \$465,258
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L JUDGE HQ/J BERGSTRAHL 11-Astronomy

NAGW 2235 University of Southern California 2728
NAGW-2235/UNIV. OF SOUTHERN CALIF @ LOS ANGELES/ BASIN SEDIMENT TRANSPORT ON MARS
Period *Obligations*
03/11/1991-12/31/1993 FY94: \$0 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D S GORSLINE HQ/T A MAXWELL 32-Geological Sci

NAGW 2354 University of Southern California 2729
A RARE GAS OPTICS-FREE ABSOLUTE PHOTON FLUX AND ENERGY ANALYZER FOR SOLAR AND PLANETARY OBSERVATION
Period *Obligations*
05/21/1991-06/30/1994 FY94: \$0 TOTAL: \$279,402
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L JUDGE HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2558 University of Southern California 2730
NAGW-2558/UNIV SOUTHERN CA @ LOS ANGELES/BIO-OPTICAL INTERPRETATION OF OCEAN COLOR IMAGERY
Period *Obligations*
06/13/1991-12/31/1992 FY94: \$0 TOTAL: \$244,943
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A KIEFER HQ/B G MITCHELL 32-Geological Sci
HQ/D E WICKLAND

NAGW 2677 University of Southern California 2731
A RARE GAS OPTIC-FREE ABSOLUTE PHOTON FLUX
Period *Obligations*
08/20/1991-05/31/1994 FY94: \$0 TOTAL: \$244,469
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L JUDGE HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 2834 University of Southern California 2732
NAGW-2834/UNIV SOUTHERN CA/A STUDY OF THE IO TORUS
Period *Obligations*
01/17/1992-12/31/1993 FY94: \$38,022 TOTAL: \$158,023
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E SHEMANSKY HQ/W L QUAIDE 11-Astronomy

NAGW 2902 University of Southern California 2733
GEOLOGICAL MAPPING OF ARGENTINIAN PLANTIA
Period *Obligations*
02/10/1992-06/30/1994 FY94: \$15,000 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D S GORSLINE HQ/J M BOYCE 32-Geological Sci

NAGW 3002 University of Southern California 2734
ANALYSIS OF VOYAGER EUV OBSERVATIONS OF NEPTUNE AND TRITON
Period *Obligations*
03/23/1992-03/31/1994 FY94: \$0 TOTAL: \$93,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E SHEMANSKY HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3063 University of Southern California 2735
A HIGHLY STABLE SEMICONDUCTOR DIODE SPECTROMETER FOR SOLAR SYSTEM INVESTIGATIONS
Period *Obligations*
04/28/1992-01/31/1995 FY94: \$75,719 TOTAL: \$263,757
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L JUDGE HQ/W J WAGNER 31-Atmos Sci
HQ/J D BOHLIN

NAGW 3149 University of Southern California 2736
GLOBAL CLIMATOLOGY
Period *Obligations*
07/24/1992-04/30/1995 FY94: \$31,803 TOTAL: \$180,798
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C DUGDALE HQ/R E MURPHY 33-Oceanography
F P WILKERSON HQ/J A KAYE

NAGW 3378 University of Southern California 2737
GROUND BASED STUDIES OF THERMOCAPILLARY FLOWS IN LEVITATED DROPS
Period *Obligations*
02/24/1993-03/31/1995 FY94: \$70,000 TOTAL: \$140,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S S SADHAL HQ/B C CARPENTER 46-Mech Engr

NAGW 3520 University of Southern California 2738
DEVELOPMENT OF A NEW TYPE OF EUV/UV FILTER FOR PLANETARY MAGNETOSPHERE IMAGING IN ENA FLUXES
Period *Obligations*
04/30/1993-04/30/1995 FY94: \$75,065 TOTAL: \$129,328
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M GRUNTMAN HQ/E C WHIPPLE 11-Astronomy
HQ/J D BOHLIN

NAGW 3547 University of Southern California 2739
QUANTITATIVE CHARACTERIZATION OF THE SMALL SCALE FRACTURE PATTERNS
Period *Obligations*
04/23/1993-06/30/1995 FY94: \$43,000 TOTAL: \$103,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C G SAMMIS HQ/J T BERGSTRAHL 32-Geological Sci

NAGW 3574 University of Southern California 2740
ANALYSIS OF PHOTOSYNTHETIC RATE AND BIO-OPTICAL COMPONENTS FROM OCEAN COLOR IMAGERY
Period *Obligations*
05/30/1993-02/28/1996 FY94: \$165,000 TOTAL: \$275,553
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A KIEFER HQ/D E WICKLAND 33-Oceanography
HQ/A C JANETOS

NAGW 3762 University of Southern California 2741
APPLICATION OF DIGITAL ELEVATION AND REMOTELY SENSED DATA TO NEOTECTONICS
Period *Obligations*
09/23/1993-06/30/1994 FY94: \$0 TOTAL: \$43,666
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D BURBANK HQ/M BALTUCK 32-Geological Sci
E PAYLOR

NASA'S UNIVERSITY PROGRAM **CALIFORNIA (Continued)**

NAGW 3763 University of Southern California 2742
CONTRIBUTION OF PHYCOERYTHRIN-CONTAINING PHYTOPLANKTON TO REMOTELY SENSE SIGNALS IN THE OCEAN

Period	Obligations	
09/29/1993-02/28/1995	FY94: \$55,000	TOTAL: \$55,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R ITURRIAGA	HQ/D E WICKLAND	33-Oceanography
M VERNET	HQ/A C JANETOS	

NAGW 3905 University of Southern California 2743
OUTER PLANET UPPER ATMOSPHERE

Period	Obligations	
03/23/1994-12/31/1994	FY94: \$60,000	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D SHEMANSKY	HQ/J BERGSTRALH	31-Atmos Sci

NAGW 3949 University of Southern California 2744
OPTICAL MEASUREMENTS FROM MOORINGS IN SUPPORT OF SEA WIFS

Period	Obligations	
04/26/1994-03/31/1996	FY94: \$179,077	TOTAL: \$179,077
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T D DICKEY	HQ/A C JANETOS	33-Oceanography
M STRAMSKA		

NASW 4680 University of Southern California 2745
NASW-4680/UNIV SOUTHERN CA/NASA RTTC LOCATED IN THE FAR WEST REGION OF THE U.S.

Period	Obligations	
12/20/1991-12/31/1994	FY94: \$1,340,000	TOTAL: \$3,380,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R STARK	HQ/F E PENARANDA	99-Multi-Discip

NCC 2-538 University of Southern California 2746
RESEARCH ON SOAR

Period	Obligations	
01/01/1988-12/31/1993	FY94: \$0	TOTAL: \$482,542
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P ROSENBLUM	ARC/P FRIEDLAND	22-Computer Science
	ARC/P D LAIRD	

NCC 2-539 University of Southern California 2747
CENTER FOR EXPERIMENTAL RESEARCH IN PARALLEL ALGORITHMS, SOFTWARE, AND SYSTEMS

Period	Obligations	
05/01/1988-05/31/1994	FY94: \$0	TOTAL: \$5,316,893
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D W MIZELL	ARC/H LUM	22-Computer Science
	ARC/D B MCKELLAR	

NCC 2-719 University of Southern California 2748
TASK ON MANAGEMENT OF KNOWLEDGE REPRESENTATION STANDARDS

Period	Obligations	
06/12/1991-05/31/1993	FY94: \$0	TOTAL: \$194,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R NECHES	ARC/P E FRIEDLAND	22-Computer Science

NCC 2-812 University of Southern California 2749
EVALUATION OF THE EFFECTS OF CREW RESOURCE MANAGEMENT TRAINING IN AIRLINE MAINTENANCE

Period	Obligations	
07/16/1993-12/31/1994	FY94: \$0	TOTAL: \$69,977
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J C TAYLOR	ARC/B G KANKI	62-Social Aspects
	ARC/J M ORASANU	

NCC 2-4002 University of Southern California 2750
APPLICATION OF H-INFINITY OPTIMAL CONTROL TECH

Period	Obligations	
12/01/1993-12/01/1994	FY94: \$45,000	TOTAL: \$45,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E A JONCKHEERE	ARC/F B BURCHAM	44-Civil Engr

NGT 00-030-108 University of Southern California 2751
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/21/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R M KUDELA	HQ/G ASRAR	33-Oceanography
	HQ/D M BUTLER	

NGT 00-030-180 University of Southern California 2752
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
08/25/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T DICKEY	HQ/G ASRAR	99-Multi-Discip
	HQ/D M BUTLER	

NGT 00-051-358 University of Southern California 2753
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/08/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P D RONNEY	HQ/G A LESANE	46-Mech Engr

NGT 00-070-290 University of Southern California 2754
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
08/14/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G A BEKEY	GSFC/H ASKHENES	22-Computer Science

NGT 00-090-142 University of Southern California 2755
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
11/02/1992-08/14/1995	FY94: \$12,000	TOTAL: \$36,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L YATES	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-171 University of Southern California 2756
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/27/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L YATES	HQ/D K RUSSELL	99-Multi-Discip

NSG-5108 University of Southern California 2757
ROCKET EXPERIMENTS TO MEASURE THE SOLAR SPECTRAL PROFILE AND INTENSITY

Period	Obligations	
04/01/1976-10/31/1994	FY94: \$187,776	TOTAL: \$2,455,418
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D L JUDGE	GSFC/L J EARLY	13-Physics
H S OGAWA	GSFC/R H PLESS	

**NASA'S UNIVERSITY PROGRAM
CALIFORNIA (Continued)**

NSG-5422 University of Southern California 2758
A COMPARATIVE STUDY OF THE LAR ULTRAVIOLET SPECTRA OF
BE STARS
Period Obligations
10/15/1979-01/31/1994 FY94: \$13,560 TOTAL: \$357,240
Prin. Invest. NASA Tech. Officer CASE Category
G J PETERS GSFC/D WEST 11-Astronomy
R S POLIDAN
J R PERCY

COLORADO

NAG 1-1475 Colorado School of Mines 2759
APPLICATIONS OF ELECTRONIC STRUCTURE THEORY TO THE
DESIGN OF NI BASED SUPERALLOYS
Period Obligations
01/12/1993-01/07/1994 FY94: \$1 TOTAL: \$40,001
Prin. Invest. NASA Tech. Officer CASE Category
M E EBERHART LARC/R A OUTLAW 47-Materials Engr
LARC/W E MEADOR

NAG 2-849 Colorado School of Mines 2760
APPLICATIONS OF ELECTRONIC STRUCTURE THEORY TO THE
DESIGN OF HIGH TEMPERATURE MATERIALS
Period Obligations
06/17/1993-06/30/1994 FY94: \$0 TOTAL: \$104,516
Prin. Invest. NASA Tech. Officer CASE Category
M EBERHART ARC/S R LANGHOFF 13-Physics

NAG 3-1409 Colorado School of Mines 2761
THE EFFECTS OF MICROGRAVITY ON VAPOR PHASE SINTERING
Period Obligations
01/05/1993-12/17/1995 FY94: \$136,463 TOTAL: \$262,054
Prin. Invest. NASA Tech. Officer CASE Category
D READY LERC/T K GLASGOW 47-Materials Engr
LERC/R ASTHANA

NAG 3-1628 Colorado School of Mines 2762
COMBUSTION OF PTIE: THE EFFECTS OF GRAVITY ON ULT RAINE
PARTICLE GENERATION
Period Obligations
06/24/1994-06/23/1995 FY94: \$108,900 TOTAL: \$108,900
Prin. Invest. NASA Tech. Officer CASE Category
J T MCKINNON LERC/R FRIEDMAN 43-Chem Engr
LERC/H D ROSS

NCC 3-215 Colorado School of Mines 2763
A FUNDAMENTAL STUDY OF THE COMBUSTION SYNTHESIS OF
CERAMIC-METAL COMPOSITE MATS UNDER MICROGRAV COND
Period Obligations
05/09/1991-01/18/1995 FY94: \$60,000 TOTAL: \$367,969
Prin. Invest. NASA Tech. Officer CASE Category
J J MOORE LERC/T K GLASGOW 47-Materials Engr
D G WIRTH
J B HOLT

NCC 3-289 Colorado School of Mines 2764
THE SYNERGISTIC EFFECT OF CERAMIC MATERIALS SYNTHESIS
USING VAPRO-ENHANCED REACT SINT UNDER MICROGR
Period Obligations
01/06/1993-12/31/1995 FY94: \$125,000 TOTAL: \$250,000
Prin. Invest. NASA Tech. Officer CASE Category
J J MOORE LERC/E S NELSON 47-Materials Engr
LERC/T GLASGOW

NAG 1-1137 Colorado State University 2765
THE DIURNAL AND SEASONAL RESPONSE OF BOUNDARY- LAYER
CLOUDS TO SOLAR WARMING
Period Obligations
05/23/1990-12/07/1994 FY94: \$60,000 TOTAL: \$268,001
Prin. Invest. NASA Tech. Officer CASE Category
D A RANDALL LARC/T OWENS 31-Atmos Sci
LARC/T L OWENS

NAG 1-1146 Colorado State University 2766
OBSERVATIONS OF UPPER AND MIDDLE TROPOSPHERIC CLOUDS.
Period Obligations
05/29/1990-11/30/1994 FY94: \$185,000 TOTAL: \$861,348
Prin. Invest. NASA Tech. Officer CASE Category
S K COX LARC/T OWENS 31-Atmos Sci
J M DAVIS LARC/T L OWENS

NAG 1-1266 Colorado State University 2767
AN INTERDISCIPLINARY SCIENCE INVESTIGATION OF CLOUDS AND
THE EARTH'S RADIANT ENERGY SYSTEM-CERES
Period Obligations
05/06/1991-05/02/1995 FY94: \$150,000 TOTAL: \$407,774
Prin. Invest. NASA Tech. Officer CASE Category
D A RANDALL LARC/B A WIELICKI 31-Atmos Sci
LARC/J W YOUNGBLOOD

NAG 1-1461 Colorado State University 2768
REUSE METRICS FOR OBJECT ORIENTED SOFTWARE NLPN 92-821
Period Obligations
12/04/1992-12/01/1994 FY94: \$45,000 TOTAL: \$89,997
Prin. Invest. NASA Tech. Officer CASE Category
J M BIEMAN LARC/K A SMITH 22-Computer Science
LARC/W H BRYANT

NAG 2-924 Colorado State University 2769
MEASUREMENTS OF ICE NUCLEATING AEROSOLS IN THE UPPER
TROPOSPHERE AND LOWER STRATOSPHERE
Period Obligations
08/10/1994-10/31/1994 FY94: \$45,568 TOTAL: \$45,568
Prin. Invest. NASA Tech. Officer CASE Category
S M KREIDENWEISS ARC/E P CONDON 31-Atmos Sci
ARC/O B TOOM

NAG 3-776 Colorado State University 2770
SPACE PLASMA CONTRACTOR RESEARCH
Period Obligations
01/20/1987-05/31/1995 FY94: \$50,027 TOTAL: \$673,494
Prin. Invest. NASA Tech. Officer CASE Category
P J WILBUR LERC/J C KOLECKI 42-Astro Engr
J E CARON LERC/C K PURVIS

NAG 3-1206 Colorado State University 2771
ADVANCED ELECTRIC PROPULSION RESEARCH
Period Obligations
01/03/1991-04/30/1995 FY94: \$110,277 TOTAL: \$233,099
Prin. Invest. NASA Tech. Officer CASE Category
P J WILBUR LERC/V K RAWLIN 13-Physics

NAG 3-1520 Colorado State University 2772
DISCRETE-LAYER PIEZOELECTRIC PLATE AND SHELL MODELS FOR
ACTIVE TIP-CLEARANCE CONTROL
Period Obligations
08/31/1993-08/24/1994 FY94: \$0 TOTAL: \$30,008
Prin. Invest. NASA Tech. Officer CASE Category
P R HEYLIGER LERC/D A HOPKINS 46-Mech Engr
LERC/J M PEREIRA

NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)

NAG 5-1058 Colorado State University 2773
 HYDROLOGICAL CLOUD STUDIES
Period *Obligations*
 07/15/1988-08/31/1995 FY94: \$85,000 TOTAL: \$585,806
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D RANDALL GSFC/W WISCOMBE 31-Atmos Sci

NAG 5-1592 Colorado State University 2774
 RESEARCH IN SUPPORT OF A MICROWAVE PRECIPITATION
 RETRIEVAL ALGORITHM FOR TRMM
Period *Obligations*
 05/20/1991-05/31/1994 FY94: \$0 TOTAL: \$306,434
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G L STEPHENS GSFC/R ADLER 31-Atmos Sci

NAG 5-1653 Colorado State University 2775
 WATER AND CLIMATE
Period *Obligations*
 06/24/1991-09/30/1995 FY94: \$80,000 TOTAL: \$285,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D RANDALL GSFC/D STARR 31-Atmos Sci

NAG 5-2078 Colorado State University 2776
 NUMERICAL MODEL ESTIMATION OF AREA AVERAGED SURFACE
 FLUXES DURING FIFE
Period *Obligations*
 08/25/1992-08/31/1994 FY94: \$0 TOTAL: \$310,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R A PIELKE GSFC/F G HALL 39-Env Sci, NEC
 T J LEE GSFC/P SELLERS

NAG 5-2302 Colorado State University 2777
 MODELING BIOSPHERE-ATMOSPHERE INTERACTIONS AT VARIOUS
 SCALES IN SUPPORT OF BOREAS
Period *Obligations*
 06/30/1993-06/30/1995 FY94: \$50,000 TOTAL: \$65,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R A PIELKE GSFC/F G HALL 39-Env Sci, NEC
 GSFC/P SELLERS

NAG 5-2692 Colorado State University 2778
 GROUND TRUTH RESEARCH AND ALGORITHM DEVELOPMENT IN
 SUPPORT OF TRMM
Period *Obligations*
 08/26/1994-08/31/1995 FY94: \$122,000 TOTAL: \$122,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S A RUTLEDGE GSFC/O THIELE 31-Atmos Sci

NAG 8-890 Colorado State University 2779
 MICROWAVE RADIATIVE TRANSFER STUDIES OF PRECIPITATION
Period *Obligations*
 09/06/1991-09/17/1994 FY94: \$0 TOTAL: \$285,575
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 V N BRINGI MSFC/R E HOOD 31-Atmos Sci
 J VIVEKANANDAN

NAG 8-981 Colorado State University 2780
 WATER VAPOR STUDY OVER THE GLOBAL OCEANS IN COMPARISON
 WITH CLIMATE MODEL SIMULATIONS
Period *Obligations*
 08/04/1993-06/30/1995 FY94: \$82,000 TOTAL: \$164,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G L STEPHENS MSFC/F R ROBERTSON 31-Atmos Sci

NAG 9-10 Colorado State University 2781
 LIFE SPANS SKIN FIBROBLASTS
Period *Obligations*
 06/16/1980-05/01/1994 FY94: \$0 TOTAL: \$752,450
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J LETT JSC/D R MORRISON 56-Medical Sciences
 A B COX
 A C LEE

NAG 9-576 Colorado State University 2782
 CHEMICAL STUDIES OF LUNAR SIMULANTS AND REGOLITH AS
 PLANT GROWTH MEDIA
Period *Obligations*
 03/23/1992-01/01/1995 FY94: \$30,000 TOTAL: \$109,304
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W L LINDSAY JSC/D L HENNINGER 55-Agriculture Sci

NAG 9-583 Colorado State University 2783
 RADIOBIOLOGICAL STUDIES
Period *Obligations*
 05/22/1992-10/01/1995 FY94: \$0 TOTAL: \$170,750
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J METT JSC/D MORRISON 56-Medical Sciences

NAGW 2069 Colorado State University 2784
 INFLATABLE STRUCTURES FOR A LUNAR BASE
Period *Obligations*
 04/27/1990-06/30/1995 FY94: \$0 TOTAL: \$337,702
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M E CRISWELL HQ/G I JOHNSTON 46-Mech Engr
 P S NOWAK

NAGW 2662 Colorado State University 2785
 USING MULTI-SENSOR DATA TO MODEL FACTORS LIMITING
 CARBON BALANCE IN GLOBAL ARID AND SEMIARID LANDS
Period *Obligations*
 08/22/1991-03/31/1995 FY94: \$507,790 TOTAL: \$2,162,790
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D S SCHIMEL HQ/R E MURPHY 39-Env Sci, NEC
 HQ/W S WILSON

NAGW 2700 Colorado State University 2786
 NAGW-2700/COLORADO STATE UNIV/GLOBAL ANALYSIS OF THE
 EARTH ENERGY BUDGET AND WATER CYCLE USING SATELLITE
Period *Obligations*
 09/16/1991-05/31/1995 FY94: \$150,000 TOTAL: \$425,550
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T H HAAR HQ/J C DODGE 31-Atmos Sci
 HQ/A J TUYAHOV

NAGW 3957 Colorado State University 2787
 RADIOBIOLOGICAL STUDIES
Period *Obligations*
 04/25/1994-06/30/1995 FY94: \$90,000 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J T LETT HQ/F M SULZMAN 56-Medical Sciences

NAGW 4122 Colorado State University 2788
 STUDIES OF THE EARTH ENERGY BUDGET AND WATER CYCLE
 USING SATELLITE OBSERVATIONS AND MODEL ANALYSES
Period *Obligations*
 09/08/1994-08/31/1995 FY94: \$81,439 TOTAL: \$81,439
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G C CAMPBELL HQ/J C DODGE 31-Atmos Sci
 HQ/R A SCHIFFER

NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)

NAS 1-19951 Colorado State University 2789
 SCIENCE SUPPORT TO THE LITE SCIENCE TEAM
Period Obligations
 07/20/1993-07/19/1996 FY94: \$30,000 TOTAL: \$55,000
Prin. Invest. NASA Tech. Officer CASE Category
 D RANDALL LARC/G L MADDREA 31-Atmos Sci

NAS 3-26410 Colorado State University 2790
 ACTS PROPAGATION EXPERIMENTS
Period Obligations
 05/19/1993-08/31/1995 FY94: \$50,000 TOTAL: \$155,000
Prin. Invest. NASA Tech. Officer CASE Category
 V N BRINGI LERC/R J GUNDERMAN 41-Aero Engr

NAS 5-31730 Colorado State University 2791
 EOS - BIOSPHERE - ATMOSPHERE INTERACTION STUDY
Period Obligations
 10/18/1991-12/31/1999 FY94: \$187,500 TOTAL: \$586,000
Prin. Invest. NASA Tech. Officer CASE Category
 D RANDALL GSFC/P SELLERS 31-Atmos Sci

NAS 9-18735 Colorado State University 2792
 SPACELAB LIFE SCIENCES (SLS-2) MISSION SUPPORT
Period Obligations
 06/24/1992-01/01/1994 FY94: \$22,642 TOTAL: \$261,014
Prin. Invest. NASA Tech. Officer CASE Category
 M J FETTMAN JSC/K NEWKIRK 59-Life Sci, NEC

NCC 2-877 Colorado State University 2793
 RESEARCHING NEW RELATIONSHIPS BETWEEN GOVERNMENT,
 INDUSTRY AND THE EDUCATION COMMUNITY
Period Obligations
 09/30/1994-12/31/1994 FY94: \$290,731 TOTAL: \$290,731
Prin. Invest. NASA Tech. Officer CASE Category
 G R COULTER ARC/K A SOUZA 99-Multi-Discip
 ARC/P DYAL

NGT 00-030-046 Colorado State University 2794
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 09/06/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 T J GREENWALD HQ/D M BUTLER 31-Atmos Sci
 G L STEPHENS HQ/G S WILSON

NGT 00-030-064 Colorado State University 2795
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 08/30/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 C W LANDSEA HQ/D M BUTLER 31-Atmos Sci
 W M GRAY HQ/G S WILSON

NGT 00-030-099 Colorado State University 2796
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 10/21/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 C A DEMOTT HQ/G ASRAR 32-Geological Sci
 HQ/J S THEON

NGT 00-030-106 Colorado State University 2797
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 10/21/1992-12/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 T L JENSEN HQ/G ASRAR 32-Geological Sci
 HQ/D M BUTLER

NGT 00-030-144 Colorado State University 2798
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 V B BROWN HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NGT 00-030-147 Colorado State University 2799
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 10/21/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 J A KNAFF HQ/G ASRAR 31-Atmos Sci
 HQ/D M BUTLER

NGT 00-030-150 Colorado State University 2800
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 10/21/1992-11/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 A S DENNING HQ/G ASRAR 32-Geological Sci
 HQ/D M BUTLER

NGT 00-030-190 Colorado State University 2801
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 08/25/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 R H JOHNSON HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NGT 00-050-848 Colorado State University 2802
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/25/1991-06/30/1994 FY94: \$0 TOTAL: \$62,892
Prin. Invest. NASA Tech. Officer CASE Category
 M THOMPSON HQ/F C OWENS 45-Elec Engr

NGT 00-050-929 Colorado State University 2803
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/29/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 W Z SADEH HQ/J K ALEXANDER 44-Civil Engr

NGT 00-051-146 Colorado State University 2804
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/28/1993-08/31/1994 FY94: \$0 TOTAL: \$0
Prin. Invest. NASA Tech. Officer CASE Category
 R GOTSHALL HQ/R WHITE 55-Agriculture Sci
 A TUCKER

NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)

NGT 00-070-373 Colorado State University 2805
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 08/22/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 W Z SADEH HQ/D K RUSSELL 44-Civil Engr

NAG 1-1355 University of Colorado - Boulder 2812
 OBSERVATIONAL AND MODELING STUDIES OF RADIATIVE CH
 EMICAL AND DYNAMICAL INTERACTIONS IN THE EARTH AT
Period Obligations
 12/18/1991-12/31/1995 FY94: \$0 TOTAL: \$335,700
Prin. Invest. NASA Tech. Officer CASE Category
 M L SALBY LARC/W L GROSE 31-Atmos Sci
 LARC/E E REMSBERG

NAG 9-612 Univ. of Colorado Health Science Center 2806
 ROLE OF PERIPHERAL BLOOD MONOCYTES IN MEDIATING AND
 CELL HYPORESPONSIVENESS DURING HUMAN STRESS
Period Obligations
 06/15/1992-05/01/1995 FY94: \$56,750 TOTAL: \$182,830
Prin. Invest. NASA Tech. Officer CASE Category
 R T MEEHAN JSC/C F SAMS 56-Medical Sciences
 JSC/H LANE

NAG 1-1390 University of Colorado - Boulder 2813
 CHARACTERIZATION OF LAMINATED COMPOSITE TUBES US ING
 ULTRASONIC GUIDED WAVES
Period Obligations
 02/13/1992-01/22/1994 FY94: \$0 TOTAL: \$50,001
Prin. Invest. NASA Tech. Officer CASE Category
 W P RODGERS LARC/W H PROSSER 46-Mech Engr

NAGW 3850 Univ. of Colorado Health Science Center 2807
 UNIV COLORADO HEALTH SCI CTR: ROLE OF PERIPHERAL B LOOD
 MONOCYTES IN MDEIATING T CELL
Period Obligations
 01/11/1994-12/31/1994 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
 R T MEEHAN HQ/J H STOKLOSA 59-Life Sci, NEC

NAG 1-1391 University of Colorado - Boulder 2814
 HIGH PERFORMANCE SUBSTRUCTURING ALGORITHMS FOR
 MASSIVELY PARALLEL ARCHITECTURES
Period Obligations
 02/13/1992-01/19/1995 FY94: \$80,000 TOTAL: \$219,498
Prin. Invest. NASA Tech. Officer CASE Category
 C FARHAJ LARC/R E GILLIAN 46-Mech Engr
 LARC/J M HOUSNER

NAG 1-756 University of Colorado - Boulder 2808
 COMPUTATIONAL METHODS AND SOFTWARE SYSTEMS FOR
 DYNAMICS AND CONTROL OF LARGE SPACE STRUCTURES
Period Obligations
 04/10/1987-08/30/1994 FY94: \$17,000 TOTAL: \$913,359
Prin. Invest. NASA Tech. Officer CASE Category
 K C PARK LARC/G L GILES 46-Mech Engr
 C A FELIPPA LARC/W J STROUD

NAG 1-1440 University of Colorado - Boulder 2815
 HF RADAR GROUND TRUTH SUPPORT OF UARS WIND
 MEASUREMENTS IN HAWAII
Period Obligations
 05/21/1992-06/30/1995 FY94: \$57,001 TOTAL: \$169,001
Prin. Invest. NASA Tech. Officer CASE Category
 D C FRITTS LARC/J G WELLS 31-Atmos Sci

NAG 1-998 University of Colorado - Boulder 2809
 GLOBAL SURFACE-BASED CLOUD OBSERVATIONS FOR ISCCP
Period Obligations
 05/25/1989-06/30/1994 FY94: \$1 TOTAL: \$381,509
Prin. Invest. NASA Tech. Officer CASE Category
 J LONDON LARC/T OWENS 31-Atmos Sci
 S G WARREN LARC/T L OWENS

NAG 1-1472 University of Colorado - Boulder 2816
 NUMERICAL SIMULATION OF SHOCK TURBULENT BOUNDARY
 LAYER INTERACTION
Period Obligations
 12/30/1992-08/14/1994 FY94: \$0 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
 S BIRINGEN LARC/W E ZORUMSKI 41-Aero Engr

NAG 1-1161 University of Colorado - Boulder 2810
 A NUMERICAL INVESTIGATION OF ROUGHNESS EFFECTS ON
 BOUNDARY LAYER TRANSITION.
Period Obligations
 07/05/1990-05/31/1995 FY94: \$0 TOTAL: \$163,300
Prin. Invest. NASA Tech. Officer CASE Category
 S BIRINGEN LARC/C L STREETT 41-Aero Engr
 LARC/A KUMAR

NAG 1-1483 University of Colorado - Boulder 2817
 CONCEPTUAL DESIGN AND ANALYSIS OF BATTEN ACTUATED
 DEPLOYABLE TRUSSES
Period Obligations
 02/25/1993-02/24/1995 FY94: \$36,073 TOTAL: \$88,932
Prin. Invest. NASA Tech. Officer CASE Category
 M M MIKULAS LARC/H G BUSH 46-Mech Engr
 K C PARK

NAG 1-1200 University of Colorado - Boulder 2811
 COMPUTATIONAL METHODS FOR CONTROL-STRUCTURE INTER-
 ACTION ANALYSIS
Period Obligations
 11/29/1990-09/30/1994 FY94: \$18,995 TOTAL: \$198,227
Prin. Invest. NASA Tech. Officer CASE Category
 K C PARK LARC/W K BELVIN 49-Engr, NEC
 C A FELIPPA

NAG 1-1490 University of Colorado - Boulder 2818
 EXPERIMENTAL ADAPTIVE CONTROL OF SELF-ACTUATED
 PRECISION DEPLOYABLE SPACE STRUCTURES
Period Obligations
 02/25/1993-02/24/1994 FY94: \$0 TOTAL: \$106,906
Prin. Invest. NASA Tech. Officer CASE Category
 L D PETERSON LARC/H G BUSH 46-Mech Engr
 K C PARK

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 1-1491 University of Colorado - Boulder 2819
IONOSPHERIC CALIBRATION FOR SINGLE FREQUENCY ALTIMETER MEASUREMENTS
Period Obligations
02/25/1993-11/30/1994 FY94: \$25,001 TOTAL: \$50,001
Prin. Invest. NASA Tech. Officer CASE Category
G H BORN LARC/S J KZETZBERG 33-Oceanography
W SCHREINER LARC/J W JOHNSON

NAG 1-1506 University of Colorado - Boulder 2820
SCIENTIFIC POTENTIAL OF SIMULTANEOUS TOPEX FOLLOW-ON AND GEOSAT FOLLOW-ON MISSIONS
Period Obligations
04/22/1993-10/31/1993 FY94: \$0 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
G H BORN LARC/S J KZETZBERG 33-Oceanography
J W JOHNSON LARC/J W JOHNSON

NAG 1-1581 University of Colorado - Boulder 2821
INVESTIGATION OF OPERATIONAL PROBLEMS ASSOCIATED WITH FLIGHT MODE ANNUNCIATION
Period Obligations
03/24/1994-03/23/1995 FY94: \$294,356 TOTAL: \$294,356
Prin. Invest. NASA Tech. Officer CASE Category
P G POLSON LARC/M T PALMER 69-Psych, NEC
LARC/P C SCHUTTE

NAG 1-1642 University of Colorado - Boulder 2822
EFFECT OF SMEARED ORTHOTROPIC STIFFNESS PROPERTIES ON THE FLAW SENSITIVITY OF STIFFENED PANELS
Period Obligations
09/01/1994-08/31/1995 FY94: \$17,909 TOTAL: \$17,909
Prin. Invest. NASA Tech. Officer CASE Category
M M MIKULAS LARC/J H STARNES 41-Aero Engr
LARC/W B FICHTER

NAG 2-504 University of Colorado - Boulder 2823
PIONEER VENUS ORBITER ULTRAVIOLET SPECTROMETER OPERATIONS AND DATA ANALYSIS
Period Obligations
03/01/1988-12/31/1993 FY94: \$0 TOTAL: \$1,505,842
Prin. Invest. NASA Tech. Officer CASE Category
A I STEWART ARC/L E LASHER 11-Astronomy
ARC/R O FIMMEL

NAG 2-753 University of Colorado - Boulder 2824
AIRBORNE ASTRONOMY WITH 100UM-400UM HETERODYNE SPECTROMETER
Period Obligations
01/29/1992-09/30/1994 FY94: \$0 TOTAL: \$612,500
Prin. Invest. NASA Tech. Officer CASE Category
A L BETZ ARC/C D LAUGHLIN 11-Astronomy
ARC/C M GILLESPIE JR.

NAG 2-760 University of Colorado - Boulder 2825
HETEROGENEOUS CHEMISTRY RELATED TO STRATOSPHERIC AIRCRAFT: MICROPHYSICAL AND CHEMICAL PROPERTIES....
Period Obligations
02/24/1992-02/28/1995 FY94: \$130,000 TOTAL: \$377,227
Prin. Invest. NASA Tech. Officer CASE Category
M A TOLBERT ARC/E CONDON 31-Atmos Sci
ARC/O B TOON

NAG 2-761 University of Colorado - Boulder 2826
ANALYTICAL ELECTRON MICROSCOPIC ANALYSIS OF SUBMICRON AEROSOL PARTICLES
Period Obligations
02/24/1992-03/31/1994 FY94: \$0 TOTAL: \$64,000
Prin. Invest. NASA Tech. Officer CASE Category
P J SHERIDAN ARC/E CONDON 31-Atmos Sci
ARC/O B TOON

NAG 2-827 University of Colorado - Boulder 2827
MASSIVELY PARALLEL AND SCALABLE IMPLICIT TIME INTEGRATION ALGORITHMS FOR STRUCTURAL DYNAMICS
Period Obligations
03/24/1993-12/31/1994 FY94: \$68,766 TOTAL: \$133,766
Prin. Invest. NASA Tech. Officer CASE Category
C FARHAT ARC/T A LASINSKI 41-Aero Engr
ARC/E BARSZCZ

NAG 2-861 University of Colorado - Boulder 2828
VENUS COMPOSITION PROBE DISCOVERY MISSION
Period Obligations
07/28/1993-06/30/1995 FY94: \$0 TOTAL: \$95,000
Prin. Invest. NASA Tech. Officer CASE Category
L W ESPOSITO ARC/L E LASHER 11-Astronomy
ARC/G S HUBBARD

NAG 2-862 University of Colorado - Boulder 2829
A TOOLKIT FOR ACTIVE OBJECT-ORIENTED DATABASES WITH APPLICATION TO INTEROPERABILITY
Period Obligations
07/29/1993-02/28/1995 FY94: \$102,000 TOTAL: \$320,704
Prin. Invest. NASA Tech. Officer CASE Category
R KING ARC/P E FRIEDLAND 22-Computer Science

NAG 2-916 University of Colorado - Boulder 2830
SYMPOSIUM ON THE DIFFUSE INTERSTELLAR BANDS
Period Obligations
07/13/1994-02/28/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
T P SNOW ARC/A G TIELENS 11-Astronomy

NAG 3-934 University of Colorado - Boulder 2831
COUPLED STRUCTURAL, THERMAL, PHASE-CHANGE AND ELECTROMAGNETIC ANALYSIS FOR SUPERCONDUCTORS
Period Obligations
09/27/1988-03/31/1993 FY94: \$0 TOTAL: \$216,834
Prin. Invest. NASA Tech. Officer CASE Category
C A FELIPPA LERC/C C CHAMIS 41-Aero Engr
K C PARK LERC/D A HOPKINS

NAG 3-1018 University of Colorado - Boulder 2832
THERMAL ACOUSTIC OSCILLATIONS IN SLUSH HYDROGEN
Period Obligations
03/13/1989-12/03/1993 FY94: \$0 TOTAL: \$90,323
Prin. Invest. NASA Tech. Officer CASE Category
K TIMMERHAUS LERC/R DEWITT 43-Chem Engr
Y GU LERC/T HARDY

NAG 3-1094 University of Colorado - Boulder 2833
INTERFACIAL PHENOMENA IN MULTILAYERED FLUID SYSTEMS
Period Obligations
12/14/1989-11/18/1994 FY94: \$201,865 TOTAL: \$926,865
Prin. Invest. NASA Tech. Officer CASE Category
J N KOSTER LERC/M E HILL 19-Phys Sci, NEC

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 3-1257 University of Colorado - Boulder 2834
IGNITION AND COMBUSTION OF BULK METALS IN A MICROGRA
VITY ENVIRONMENT

Period	Obligations	
03/11/1991-12/19/1994	FY94: \$80,000	TOTAL: \$280,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M C BRANCH	LERC/R FRIEDMAN	46-Mech Engr
J W DAILY		
H DINDI		

NAG 3-1277 University of Colorado - Boulder 2835
MICROPHYSICS OF CLOSE APPROACH AND FILM DRAINAGE AND
R UPTURE DURING DROP COALESCENCE

Period	Obligations	
04/14/1991-05/13/1995	FY94: \$0	TOTAL: \$237,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R H DAVIS	LERC/J A SALZMAN	49-Engr, NEC

NAG 3-1278 University of Colorado - Boulder 2836
MODELING AND EXPERIMENTAL STUDIES OF DROPLET PUSHING
IN MISCIBILITY-GAP ALLOY SOLIDIF UNDER LOW-G CON

Period	Obligations	
05/21/1991-07/14/1994	FY94: \$0	TOTAL: \$100,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W B KRANTZ	LERC/T K GLASGOW	47-Materials Engr

NAG 3-1383 University of Colorado - Boulder 2837
SATELLITE COMMUNICATIONS APPLICATIONS RESEARCH (SC AR)
MODELING AND EXPERIMENTS PROJECT

Period	Obligations	
12/14/1992-12/14/1993	FY94: \$0	TOTAL: \$73,440
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J N PELTON	LERC/E A BOBINSKY	45-Elec Engr
	LERC/J R RAMLER	

NAG 3-1389 University of Colorado - Boulder 2838
PHASE SEGREGATION DUE TO SIMULTANEOUS MIGRATION AND
COALESCENCE

Period	Obligations	
11/23/1992-12/31/1994	FY94: \$40,000	TOTAL: \$80,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R H DAVIS	LERC/J A SALZMAN	43-Chem Engr

NAG 3-1410 University of Colorado - Boulder 2839
MODELING AND NEW EXPERIMENT DEFINITION FOR THE VIBRA
TION ISOLATION BOX EXPERIMENT SYSTEM

Period	Obligations	
01/25/1993-01/14/1995	FY94: \$40,000	TOTAL: \$80,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R L SANI	LERC/J A SALZMAN	19-Phys Sci, NEC

NAG 3-1425 University of Colorado - Boulder 2840
HIGH PERFORMANCE PARALLEL ANALYSIS OF COUPLED PROB
LEMS FOR AIRCRAFT PROPULSION

Period	Obligations	
12/23/1992-12/31/1995	FY94: \$100,000	TOTAL: \$175,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C FILIPPA	LERC/C C CHAMIS	41-Aero Engr
C H FARHAT		
K C PARK		

NAG 3-1566 University of Colorado - Boulder 2841
COMPUTATIONAL FLUID DYNAMICS BASED ON THE METHOD O F
SPACE-TIME CONSERVATION ELEMENT AND SOLUTION ELE

Period	Obligations	
02/03/1994-02/02/1995	FY94: \$35,940	TOTAL: \$35,940
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C Y CHOW	LERC/S C CHANG	41-Aero Engr

NAG 3-1600 University of Colorado - Boulder 2842
STUDIES OF FREELY SUSPENDED LIQUID CRYSTALS BUBBLE S

Period	Obligations	
05/17/1994-05/17/1996	FY94: \$50,000	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N A CLARK	LERC/J S LING	13-Physics

NAG 3-1616 University of Colorado - Boulder 2843
THREE DIMENSIONAL FLOW OF MICROGRAVITY DIFFUSION FLAME

Period	Obligations	
06/16/1994-06/15/1995	FY94: \$100,000	TOTAL: \$100,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J R HERTZBERG	LERC/H D ROSS	46-Mech Engr

NAG 5-193 University of Colorado - Boulder 2844
SPECTROSCOPIC STUDIES OF INTERSTELLOR MOTTER AND STELLA
MOTTER LOSS

Period	Obligations	
07/01/1981-09/30/1992	FY94: \$0	TOTAL: \$502,424
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M SHULL	GSFC/D WEST	11-Astronomy
G M VOIT		

NAG 5-199 University of Colorado - Boulder 2845
INTERNATIONAL ULTROVIOLET EXPERIMENT STUDIES

Period	Obligations	
07/15/1981-01/31/1995	FY94: \$6,500	TOTAL: \$575,800
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T R AYRES	GSFC/D WEST	11-Astronomy
S L HAWLEY		
A BROWN		

NAG 5-350 University of Colorado - Boulder 2846
ANALYSIS OF SELECTED SYMBIOTIC STARS

Period	Obligations	
08/01/1983-10/14/1993	FY94:	TOTAL: \$296,605
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E W BRUGAL	GSFC/D WEST	11-Astronomy
L A WILLSON		

NAG 5-676 University of Colorado - Boulder 2847
SOLAR EXTREME ULTRAVIOLET IRRADIANCE COMPARISON
EXPERIMENT

Period	Obligations	
03/25/1991-03/31/1994	FY94: \$0	TOTAL: \$430,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T N WOODS	GSFC/L J EARLY	13-Physics
	GSFC/R H PLESS	

NAG 5-698 University of Colorado - Boulder 2848
ROCKET INVESTIGATION OF THE ROLE OF NITRIC OXIDE IN THE
LOWER THERMOSPHERE

Period	Obligations	
03/22/1993-01/31/1995	FY94: \$204,539	TOTAL: \$404,509
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C A BARTH	GSFC/L J EARLY	13-Physics
	GSFC/R H PLESS	

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 5-985 University of Colorado - Boulder 2849
SIMULTANEOUS MULTIWAVELENGTHS STUDY OF SPEEDY MIC AND
ORIGIN OF HYDROGEN BALMER EMISSION
Period Obligations
09/01/1987-01/31/1995 FY94: \$20,500 TOTAL: \$236,000
Prin. Invest. NASA Tech. Officer CASE Category
A BROWN GSFC/Y KONDO 11-Astronomy

NAG 5-1115 University of Colorado - Boulder 2850
INVESTIGATION GRAVITY WAVES CONVECTIVELY ACTIVE
BOUNDARY
Period Obligations
01/01/1989-06/30/1993 FY94: \$0 TOTAL: \$84,608
Prin. Invest. NASA Tech. Officer CASE Category
R L GROSSMAN GSFC/S H MELFI 31-Atmos Sci

NAG 5-1215 University of Colorado - Boulder 2851
THE FAR DISTANT FUTURE OF SOLAR ACTIVITY
Period Obligations
07/14/1989-11/30/1993 FY94: \$0 TOTAL: \$287,500
Prin. Invest. NASA Tech. Officer CASE Category
T R AYRES GSFC/D WEST 11-Astronomy

NAG 5-1224 University of Colorado - Boulder 2852
ASTROPHYSICAL DATA PROOGRAM RESEARCH
Period Obligations
07/27/1989-08/31/1993 FY94: \$0 TOTAL: \$306,877
Prin. Invest. NASA Tech. Officer CASE Category
J M SHULL GSFC/D WEST 11-Astronomy
J T STOCKE
R A EDELSON

NAG 5-1475 University of Colorado - Boulder 2853
PARTICIPATION IN THE EARTH PROBE TOMS MISSION
Period Obligations
10/18/1990-11/14/1993 FY94: \$0 TOTAL: \$266,741
Prin. Invest. NASA Tech. Officer CASE Category
D A RUSCH GSFC/J R HERMAN 31-Atmos Sci
T CLANEY

NAG 5-1505 University of Colorado - Boulder 2854
SOLAR ULTRAVIOLET IRRADIANCE VARIATION DURING SOLA R
CYCLE 22 - SPGIP
Period Obligations
03/27/1991-04/14/1993 FY94: \$0 TOTAL: \$124,425
Prin. Invest. NASA Tech. Officer CASE Category
T N WOODS GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-1525 University of Colorado - Boulder 2855
AN INVESTIGATION OF THE SOLAR CYCLE RESPONSES OF
ODD-NITROGEN IN THE THERMOSPHERE
Period Obligations
04/11/1991-04/30/1994 FY94: \$0 TOTAL: \$187,961
Prin. Invest. NASA Tech. Officer CASE Category
D W RUSCH GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-1526 University of Colorado - Boulder 2856
STELLAR FLARES ON AD LEO: MULTIBAND OBSERVATIONS
Period Obligations
04/05/1991-04/14/1993 FY94: \$0 TOTAL: \$24,999
Prin. Invest. NASA Tech. Officer CASE Category
G A DULK GSFC/R PETRE 11-Astronomy

NAG 5-1589 University of Colorado - Boulder 2857
ROSAT OBSERVATIONS OF JOVIAN AURORAL X-RAYS
Period Obligations
05/09/1991-05/31/1993 FY94: \$0 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
F BAGENAL GSFC/R PETRE 11-Astronomy

NAG 5-1666 University of Colorado - Boulder 2858
THE FORMATION PROCESS OF THE HE I LANBDAL10830 LINE IN
COOL GIANT
Period Obligations
06/24/1991-06/30/1993 FY94: \$0 TOTAL: \$21,667
Prin. Invest. NASA Tech. Officer CASE Category
J L LINSKY GSFC/R PETRE 11-Astronomy

NAG 5-1667 University of Colorado - Boulder 2859
DUST CONDENSATION SEQUENCE AND TIME VARIABILITY IN
CIRCUMSTELLAR SHELLS
Period Obligations
06/24/1991-12/31/1993 FY94: \$0 TOTAL: \$71,680
Prin. Invest. NASA Tech. Officer CASE Category
I R LITTLE-MARENIN GSFC/D WEST 11-Astronomy

NAG 5-1672 University of Colorado - Boulder 2860
TOWARD A BETTER UNDERSTANDING OF R CRB STARS
Period Obligations
06/27/1991-06/30/1993 FY94: \$0 TOTAL: \$76,500
Prin. Invest. NASA Tech. Officer CASE Category
G C CLAYTON GSFC/D WEST 11-Astronomy

NAG 5-1701 University of Colorado - Boulder 2861
THE CHEMICAL AND PHYSICAL CONDITIONS IN DENSE DIFF USE
CLOUDS
Period Obligations
07/15/1991-07/14/1993 FY94: \$0 TOTAL: \$58,000
Prin. Invest. NASA Tech. Officer CASE Category
T P SNOW GSFC/D WEST 11-Astronomy

NAG 5-1715 University of Colorado - Boulder 2862
PARTICIPATION IN THE VERSION O EFFORT FOR THE EOS GROUND
SYSTEM PROJECT
Period Obligations
08/13/1991-12/31/1993 FY94: \$0 TOTAL: \$255,847
Prin. Invest. NASA Tech. Officer CASE Category
W EMERY GSFC/H K RAMAPRIYAN 39-Env Sci, NEC

NAG 5-1791 University of Colorado - Boulder 2863
RIASS RETROSPECTIVE
Period Obligations
10/24/1991-10/31/1992 FY94: \$0 TOTAL: \$19,678
Prin. Invest. NASA Tech. Officer CASE Category
T R AYRES GSFC/R PETRE 11-Astronomy

NAG 5-1792 University of Colorado - Boulder 2864
CORONAL STARS IN THE ROSAT WFC SURVEY
Period Obligations
10/27/1991-10/31/1994 FY94: \$24,600 TOTAL: \$83,989
Prin. Invest. NASA Tech. Officer CASE Category
A R BROWN GSFC/R PETRE 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 5-1796 University of Colorado - Boulder 2865
ANALYSIS OF SOFT X-RAYS FROM B-EMISSION STARS
Period *Obligations*
10/29/1991-10/31/1992 FY94: TOTAL: \$9,997
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T P SNOW GSFC/R PETRE 11-Astronomy

NAG 5-1798 University of Colorado - Boulder 2866
ROSAT-IUE OBS. OF SYMBIOTIC BINARY STARS (\$15K) THE X-RAY MORPHOLOGY OF SELECTED. . . (\$24,249)
Period *Obligations*
10/29/1991-10/31/1992 FY94: TOTAL: \$38,981
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E STENCEL GSFC/R PETRE 11-Astronomy

NAG 5-1832 University of Colorado - Boulder 2867
ULTRAVIOLET MONITORING OF VV CEPHEI
Period *Obligations*
11/22/1991-11/30/1992 FY94: TOTAL: \$22,970
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E STENCEL GSFC/D WEST 11-Astronomy

NAG 5-1853 University of Colorado - Boulder 2868
GODDARD HIGH RESOLUTION SPECTROGRAPH (GHRS) INCLUDING ACTIVITIES AS A GHRS GUARANTEED TIME OBSERV.
Period *Obligations*
01/02/1992-11/14/1995 FY94: \$378,950 TOTAL: \$1,066,952
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C BRANDT GSFC/A SMITH 11-Astronomy

NAG 5-1857 University of Colorado - Boulder 2869
PSPC OBSERVATIONS FOR A COMPLETE, FLUX-LIMITED SAMPLE OF X-RAY SELECTED BL LACERTAE OBJECTS . . .
Period *Obligations*
01/02/1992-01/31/1994 FY94: \$0 TOTAL: \$62,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J T STOCKE GSFC/R PETRE 11-Astronomy

NAG 5-1879 University of Colorado - Boulder 2870
THE SHADOWING EFFECT OF THE MAGELLANIC BRIDGE ON THE EXTRAGALACTIC X-RAY BACKGROUND
Period *Obligations*
02/10/1992-08/14/1995 FY94: \$57,042 TOTAL: \$106,042
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Q WANG GSFC/R PETRE 11-Astronomy

NAG 5-1887 University of Colorado - Boulder 2871
ANALYSIS OF THE SUCCESSFUL DECEMBER 1991 COORDINATED ROSAT HST, IUE AND VLA CAMPAIGN TO OBSERVE AR.
Period *Obligations*
01/27/1992-02/14/1995 FY94: \$6,600 TOTAL: \$51,896
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L LINSKY GSFC/R PETRE 11-Astronomy

NAG 5-1908 University of Colorado - Boulder 2872
APPLICATION OF GPS TO CRUSTAL DEFORMATION STUDIES IN CALIFORNIA
Period *Obligations*
02/20/1992-02/28/1995 FY94: \$54,000 TOTAL: \$156,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K LARSON GSFC/B G BILLS 32-Geological Sci

NAG 5-1931 University of Colorado - Boulder 2873
STUDY AND DEMONSTRATION OF PLANNING AND SCHEDULING CONCEPTS FOR THE EARTH OBSERVING SYSTEM MISSION
Period *Obligations*
03/04/1992-04/14/1994 FY94: \$0 TOTAL: \$188,688
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T P SPARN GSFC/A C KELLY 22-Computer Science
A J JOUCHONX

NAG 5-1956 University of Colorado - Boulder 2874
MULTI-WAVELENGTH STUDY OF HD50896 (WN+C?) ORIGIN OF ITS VARIABILITY
Period *Obligations*
03/26/1992-11/14/1993 FY94: \$0 TOTAL: \$52,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P S CONTI GSFC/D WEST 11-Astronomy

NAG 5-2014 University of Colorado - Boulder 2875
IN IMAGING STUDY OF THE GALACTIC DIFFUSE X-RAY BACKGROUND NEAR THE GALACTIC PLAN
Period *Obligations*
07/01/1992-06/30/1995 FY94: \$1,729 TOTAL: \$61,229
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Q WANG GSFC/D WEST 11-Astronomy

NAG 5-2026 University of Colorado - Boulder 2876
MODELING THE GAMMA-RAY SPECTRA OF ACTIVE GALACTIC NUCLEI
Period *Obligations*
07/08/1992-12/31/1994 FY94: \$35,000 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M C BEGELMAN GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2075 University of Colorado - Boulder 2877
AN ALL-SKY SURVEY OF ACTIVE BINARY STARS
Period *Obligations*
08/25/1992-06/30/1995 FY94: \$15,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LINSKY GSFC/R PETRE 11-Astronomy

NAG 5-2122 University of Colorado - Boulder 2878
INTRINSIC CIV ABSORPTION IN PG-QSOS AND SEYFERT GALAXIES
Period *Obligations*
10/28/1992-03/31/1995 FY94: \$15,410 TOTAL: \$23,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M SHULL GSFC/D WEST 11-Astronomy

NAG 5-2143 University of Colorado - Boulder 2879
CATCHING IT IN THE ACT: PREDICTABLE DECLINES IN V854 CENTAURI AND UV EXTINCTION PROPERTIES OF DUST.
Period *Obligations*
11/23/1992-01/31/1995 FY94: \$59,790 TOTAL: \$88,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G C CLAYTON GSFC/D WEST 11-Astronomy

NAG 5-2147 University of Colorado - Boulder 2880
SPECTROSCOPY OF OF/WN STAR IN M33
Period *Obligations*
12/14/1992-01/31/1995 FY94: \$6,500 TOTAL: \$11,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P S CONTI GSFC/D WEST 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 5-2151 University of Colorado - Boulder 2881
AN X-RAY STUDY OF AN OPTICAL JET FEATURE IN CTB 10 8
Period *Obligations*
12/14/1992-12/14/1993 FY94: \$0 TOTAL: \$5,275
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A HAMILTON GSFC/R PETRE 11-Astronomy

NAG 5-2332 University of Colorado - Boulder 2889
MEASURING ATTITUDE WITH A GRADIOMETER
Period *Obligations*
07/27/1993-09/30/1994 FY94: \$0 TOTAL: \$39,987
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G BORN GSFC/S KENT 49-Engr, NEC

NAG 5-2161 University of Colorado - Boulder 2882
RADIATIVE AND MAGNETIC PROPERTIES OF PLAGES ON SOLAR-TYPE DWARFS
Period *Obligations*
12/31/1992-12/31/1993 FY94: \$0 TOTAL: \$16,141
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L LINSKY GSFC/D WEST 11-Astronomy

NAG 5-2353 University of Colorado - Boulder 2890
THE ROLE OF FAULT SEGMENTATION IN EARTHQUAKE DYNAMICS WITH APPLICATION TO STRIKE FAULTS IN CALIF.
Period *Obligations*
08/12/1993-08/14/1995 FY94: \$66,000 TOTAL: \$118,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J B RUNDLE GSFC/B G BILLS 32-Geological Sci

NAG 5-2256 University of Colorado - Boulder 2883
GLOBAL-SCALE TURBULENT SOLAR CONVECTION COUPLED TO ROTATION AND MAGNETIC FIELDS
Period *Obligations*
04/27/1993-04/30/1995 FY94: \$260,000 TOTAL: \$395,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J T MOORE GSFC/T J BIRMINGHAM 13-Physics
GSFC/J D BOHLIN

NAG 5-2372 University of Colorado - Boulder 2891
THERMAL AND NON-THERMAL RADIATION FROM TWO COMAE S TARS
Period *Obligations*
09/21/1993-09/30/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M GUEL GSFC/R PETRE 11-Astronomy

NAG 5-2259 University of Colorado - Boulder 2884
CONTEMPORANEOUS EUVE AND GHRS OBSERVATIONS OF THE OUTER ATMOSPHERIC STRUCTURE OF RS CVN ...
Period *Obligations*
04/30/1993-04/30/1995 FY94: \$26,500 TOTAL: \$80,137
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BROWN GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2383 University of Colorado - Boulder 2892
THE SEARCH FOR EXTRA-SOLAR OORT CLOUDS
Period *Obligations*
09/29/1993-09/30/1994 FY94: \$36,000 TOTAL: \$36,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BALLY GSFC/D WEST 11-Astronomy

NAG 5-2274 University of Colorado - Boulder 2885
THE CAPELLA DICHOTOMY: PARADIGM LOST?
Period *Obligations*
05/26/1993-05/31/1995 FY94: \$35,000 TOTAL: \$75,491
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T R AYRES GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2387 University of Colorado - Boulder 2893
OBSERVATIONAL AND THEORETICAL STUDIES OF WOLF-RAYE T STAR ATMOSPHERES
Period *Obligations*
10/06/1993-10/14/1995 FY94: \$40,600 TOTAL: \$40,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P S CONTI GSFC/D WEST 11-Astronomy

NAG 5-2283 University of Colorado - Boulder 2886
OBSERVATIONS OF G191-B2A
Period *Obligations*
06/10/1993-06/14/1995 FY94: \$38,614 TOTAL: \$65,614
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C GREEN GSFC/R OLIVERSON 11-Astronomy

NAG 5-2451 University of Colorado - Boulder 2894
TAKING TEMPERATURES IN A CORONAL NURSERY
Period *Obligations*
12/06/1993-12/14/1994 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T R AYRES GSFC/R PETRE 11-Astronomy

NAG 5-2287 University of Colorado - Boulder 2887
RELATIONSHIP BETWEEN NON-METHANE HYDROCARBON EMISSION AND LEAF CARBON BALANCE IN THE BOREAL FOREST.
Period *Obligations*
06/14/1993-06/14/1995 FY94: \$115,000 TOTAL: \$145,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K MONSON GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 5-2469 University of Colorado - Boulder 2895
THE LINE OF SIGHT TO HD 206267
Period *Obligations*
01/04/1994-01/14/1995 FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C GREEN GSFC/D WEST 11-Astronomy

NAG 5-2319 University of Colorado - Boulder 2888
VOYAGER OBSERVATIONS OF FAR-ULTRAVIOLET SPECTRAL FEATURES DUE TO INTERSTELLAR H2 AND DU ...
Period *Obligations*
07/14/1993-07/14/1994 FY94: \$0 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T P SNOW GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2470 University of Colorado - Boulder 2896
A STUDY OF RADIO CONTINUUM LOOP I ABSORPTION NEAR THE 3C273 SIGHT LINE
Period *Obligations*
01/04/1994-01/14/1995 FY94: \$2,500 TOTAL: \$2,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G S BURKS GSFC/D WEST 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 5-2514 University of Colorado - Boulder 2897
MULTI-WAVEBAND VARIABILITY CONSTRAINTS ON THE CENTRAL
ENGINE IN NGC 4151
Period Obligations
02/09/1994-02/28/1995 FY94: \$11,493 TOTAL: \$11,493
Prin. Invest NASA Tech. Officer CASE Category
J M SHULL GSFC/J P NORRIS 11-Astronomy
G REICHERT GSFC/N WHITE

NAG 5-2525 University of Colorado - Boulder 2898
X-RAY AND UV OBSERVATIONS OF AN X-RAY PULSAR IN A STELLAR
WIND
Period Obligations
02/21/1994-03/14/1995 FY94: \$18,000 TOTAL: \$18,000
Prin. Invest NASA Tech. Officer CASE Category
R A MCCRAY GSFC/R PETRE 11-Astronomy

NAG 5-2530 University of Colorado - Boulder 2899
CORONAL TEMPERATURE AND EMISSION MEASURE DISTRIBUTIONS
FOR ACTIVE SUPERGIANT BETA DRA
Period Obligations
02/24/1994-09/14/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest NASA Tech. Officer CASE Category
A BROWN GSFC/N WHITE 11-Astronomy

NAG 5-2550 University of Colorado - Boulder 2900
A THEORETICAL AND OBSERVATIONAL STUDY OF LARGE AND
SMALL SCALE DYNAMICS IN THE MESOSCALE AND ...
Period Obligations
03/15/1994-12/31/1994 FY94: \$58,500 TOTAL: \$58,500
Prin. Invest NASA Tech. Officer CASE Category
D C FRITTS GSFC/B CAMPBELL 31-Atmos Sci

NAG 5-2551 University of Colorado - Boulder 2901
TIDES, PLANETARY WAVES AND EDDY FORCING OF THE MEAN
MLT CIRCULATION FOR THE TIMED SCIENCE WORKING...
Period Obligations
03/15/1994-12/31/1994 FY94: \$58,500 TOTAL: \$58,500
Prin. Invest NASA Tech. Officer CASE Category
J M FORBES GSFC/B CAMPBELL 31-Atmos Sci

NAG 5-2576 University of Colorado - Boulder 2902
ENERGY TRANSFER IN THE THERMOSPHERE AND MESOSPHERE -
A THEORY/MODELING INTERDISCIPLINARY SCIENTIST.
Period Obligations
04/21/1994-01/31/1995 FY94: \$58,500 TOTAL: \$58,500
Prin. Invest NASA Tech. Officer CASE Category
S C SOLOMON GSFC/B CAMPBELL 11-Astronomy

NAG 5-2577 University of Colorado - Boulder 2903
EOSDIS VOIMS TIREKICKER ACTIVITIES AND SYSTEM PRO
TOTYPING
Period Obligations
04/21/1994-04/30/1995 FY94: \$110,000 TOTAL: \$110,000
Prin. Invest NASA Tech. Officer CASE Category
W J EMERY GSFC/K R McDONALD 22-Computer Science

NAG 5-2579 University of Colorado - Boulder 2904
PARTICIPATION IN THE EARTH PROBE TOMS MISSION
Period Obligations
04/21/1994-04/30/1995 FY94: \$68,357 TOTAL: \$68,357
Prin. Invest NASA Tech. Officer CASE Category
D RUSCH GSFC/J R HERMAN 31-Atmos Sci

NAG 5-2584 University of Colorado - Boulder 2905
NEOTECTONICS OF THE AFAR DEPRESSION RIFT SYSTEMS
Period Obligations
04/28/1994-11/30/1994 FY94: \$10,900 TOTAL: \$10,900
Prin. Invest NASA Tech. Officer CASE Category
R BILHAM GSFC/D J HARDING 32-Geological Sci

NAG 5-2592 University of Colorado - Boulder 2906
X-RAY SPECTRA OF BALQUASARS
Period Obligations
05/12/1994-11/14/1995 FY94: \$13,753 TOTAL: \$13,753
Prin. Invest NASA Tech. Officer CASE Category
M BEGELMAN GSFC/N WHITE 11-Astronomy

NAG 5-2596 University of Colorado - Boulder 2907
THE PHYSICS OF MASSIVE O-STARS IN DIFFERENT PARENT
GALAXIES: THE MAGELLANIC CLOUDS
Period Obligations
05/23/1994-05/31/1995 FY94: \$5,216 TOTAL: \$5,216
Prin. Invest NASA Tech. Officer CASE Category
C D GARMANY GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2597 University of Colorado - Boulder 2908
DUST CONDENSATION - ADP
Period Obligations
05/18/1994-05/31/1995 FY94: \$5,992 TOTAL: \$5,992
Prin. Invest NASA Tech. Officer CASE Category
I R LITTLE-MARENIN GSFC/D WEST 11-Astronomy

NAG 5-2610 University of Colorado - Boulder 2909
AN ULTRAVIOLET SPECTROPHOTOMETRIC CENSUS OF B SUPE
RGiants IN THE SMC
Period Obligations
06/15/1994-06/14/1995 FY94: \$14,000 TOTAL: \$14,000
Prin. Invest NASA Tech. Officer CASE Category
C GARMANY GSFC/D WEST 11-Astronomy

NAG 5-2616 University of Colorado - Boulder 2910
GALAXY CLUSTER MASSES AT MODERATE REDSHIFT
Period Obligations
06/15/1994-12/14/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest NASA Tech. Officer CASE Category
E ELLINGSON GSFC/R PETRE 11-Astronomy

NAG 5-2633 University of Colorado - Boulder 2911
SOLAR TERRESTRIAL ENERGY PROGRAM (STEP) SCIENTIST
COORDINATOR
Period Obligations
06/28/1994-11/30/1994 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest NASA Tech. Officer CASE Category
D N BAKER GSFC/J A SLAVIN 11-Astronomy

NAG 5-2634 University of Colorado - Boulder 2912
CLEMENTINE-SCIENCE TEAM MEMBER
Period Obligations
06/28/1994-11/30/1994 FY94: \$47,000 TOTAL: \$47,000
Prin. Invest NASA Tech. Officer CASE Category
D N BAKER GSFC/J A SLAVIN 11-Astronomy

NAG 5-2664 University of Colorado - Boulder 2913
CEPPAD AND CAMMICE SCIENCE TEAM ACTIVITY SUPPORT
Period Obligations
08/01/1994-12/31/1994 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest NASA Tech. Officer CASE Category
D N BAKER GSFC/M ACUNA 13-Physics

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 5-2671 University of Colorado - Boulder 2914
THE IMPACT OF PRECIPITATION ON THE TROPICAL OCEAN:
APPLICATION TO TRMM
Period *Obligations*
08/09/1994-08/14/1995 FY94: \$159,728 TOTAL: \$159,728
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J WEBSTER GSFC/W CHAO 31-Atmos Sci
J A CURRY

NAG 5-2681 University of Colorado - Boulder 2915
SAMPEX DATA ANALYSIS
Period *Obligations*
08/08/1994-12/31/1994 FY94: \$117,186 TOTAL: \$117,186
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D N BAKER GSFC/J A SLAVIN 31-Atmos Sci

NAG 5-5014 University of Colorado - Boulder 2916
COORDINATED STUDIES OF EQUATORIAL MESOSPHERIC AND
LOWER THERMOSPHERIC DYNAMICS BY ROCKET AND CADRE
Period *Obligations*
05/27/1993-12/31/1994 FY94: \$40,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D C FRITTS GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-5020 University of Colorado - Boulder 2917
HIGH RESOLUTION X-RAY SPECTROSCOPY FROM SOUNDING
ROCKETS
Period *Obligations*
03/11/1994-10/31/1994 FY94: \$170,000 TOTAL: \$170,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W C CASH GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-5021 University of Colorado - Boulder 2918
SOLAR IRRADIANCE AND THERMOSPHERIC AIRGLOW ROCKET
EXPERIMENTS
Period *Obligations*
04/04/1994-03/31/1995 FY94: \$60,250 TOTAL: \$60,250
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S C SOLOMON GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 8-190 University of Colorado - Boulder 2919
GEOPHYSICAL FLUID FLOW EXPERIMENTS ON THE UNITED STATES
MICROGRAVITY LABORATORY USML-2
Period *Obligations*
04/25/1991-09/06/1994 FY94: \$0 TOTAL: \$209,572
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J HART MSFC/J KAUFMAN 13-Physics
J TOOMRE

NAG 8-244 University of Colorado - Boulder 2920
LOW ORDER DECENTRAKIZED CONTROL OF LARGE AEROSPACE
STRUCTURES
Period *Obligations*
08/10/1992-08/31/1994 FY94: \$0 TOTAL: \$72,277
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J BALAS MSFC/A P BUKLEY 49-Engr, NEC
MSFC/G MYERS

NAG 8-253 University of Colorado - Boulder 2921
COHERENT LIDAR DESIGN AND PERFORMANCE VERIFICATION
Period *Obligations*
11/13/1992-11/12/1994 FY94: \$45,000 TOTAL: \$179,024
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G FREHLICH MSFC/M J KAVAVA 13-Physics
MSFC/W D JONES

NAG 8-882 University of Colorado - Boulder 2922
ANALYSIS OF THE U S AIR FORCE DEFENSE METEOROLOGIC
ALSTAELLITE PROGRAM IMAGERY FOR GLOBAL LIGHTING
Period *Obligations*
05/15/1991-05/15/1995 FY94: \$0 TOTAL: \$310,156
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G R SCHARFEN MSFC/H J CHRISTIAN 31-Atmos Sci

NAG 8-925 University of Colorado - Boulder 2923
HST SAGA USING ADAPTIVE RMF
Period *Obligations*
07/06/1992-09/30/1993 FY94: \$0 TOTAL: \$35,877
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J BALAS MSFC/A P BUKLEY 49-Engr, NEC
MSFC/M L BUTLER

NAG 8-945 University of Colorado - Boulder 2924
BIOLOGICAL PARTICLES RESEARCH
Period *Obligations*
01/21/1993-01/31/1995 FY94: \$128,000 TOTAL: \$256,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H DAVIS MSFC/T Y MILLER 43-Chem Engr
M LOEWENBERG

NAG 8-1048 University of Colorado - Boulder 2925
ULTRAVIOLET EXTINCTION AND POLARIZATION OF INTER- STELLAR
DUST IN THE LARGE MAGELLANIC CLOUD
Period *Obligations*
03/15/1994-02/28/1995 FY94: \$50,284 TOTAL: \$50,284
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G C CLAYTON MSFC/J OWEN 31-Atmos Sci
J GREEN

NAG 8-1062 University of Colorado - Boulder 2926
SOLUTOCAPILLARY CONVECTION EFFECTS ON POLYMERIC
MEMBRANE MORPHOLOGY
Period *Obligations*
06/23/1994-06/22/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W B KRANTZ MSFC/J P DOWNEY 47-Materials Engr
P W TODD

NAG 8-1077 University of Colorado - Boulder 2927
SCIENTIFIC SUPPORT OF THE GOEPHYSICAL FLUID FLOW
EXPERIMENTS
Period *Obligations*
04/01/1994-10/31/1994 FY94: \$26,320 TOTAL: \$26,320
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E HART MSFC/J W KAUFMAN 41-Aero Engr

NAG 8-1091 University of Colorado - Boulder 2928
JOVE
Period *Obligations*
09/12/1994-05/31/1995 FY94: \$5,063 TOTAL: \$5,063
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T SNOW MSFC/F SIX 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 9-407 University of Colorado - Boulder 2929
ESTIMATING AND MODELING THE BACKGROUND ORBITAL DEBRIS
POPULATION
Period Obligations
10/01/1989-02/15/1995 FY94: \$10,000 TOTAL: \$38,420
Prin. Invest. NASA Tech. Officer CASE Category
R CULP JSC/D KESSLER 41-Aero Engr

NAG 9-574 University of Colorado - Boulder 2930
REAL TIME DYNAMICS AND CONTROL STRATEGIES FOR SPACE
OPERATIONS OF FLEXIBLE STRUCTURES
Period Obligations
04/03/1992-06/15/1994 FY94: \$0 TOTAL: \$50,922
Prin. Invest. NASA Tech. Officer CASE Category
K C PARK JSC/J W SUNKEL 45-Elec Engr

NAG 9-768 University of Colorado - Boulder 2931
ORBITAL DEBRIS OPTICAL SIGNATURE TESTS
Period Obligations
09/27/1994-04/01/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
R CULP JSC/G CRESS 43-Chem Engr

NAGW 389 University of Colorado - Boulder 2932
THEORETICAL RESEARCH IN PHYSICS OF PLANETARY
ATMOSPHERES; GLOGI OF ATMOSPHERE CONSTITENTS 6
DYACMIL
Period Obligations
11/01/1982-04/30/1994 FY94: \$3,337 TOTAL: \$730,767
Prin. Invest. NASA Tech. Officer CASE Category
L ESPOSITO HQ/K FOX 31-Atmos Sci
I STEWART HQ/W L QUAIDE

NAGW 641 University of Colorado - Boulder 2933
CRYOSPHERE DATA MANAGEMENT FOR DMSP
Period Obligations
06/01/1984-06/30/1993 FY94: \$0 TOTAL: \$4,174,929
Prin. Invest. NASA Tech. Officer CASE Category
R G BARRY HQ/R H THOMAS 33-Oceanography
HQ/W S WILSON

NAGW 766 University of Colorado - Boulder 2934
THEORY OF SPECTRA FORMATION IN ASTROPHYSICAL SYSTEMS
Period Obligations
07/15/1985-02/28/1995 FY94: \$101,700 TOTAL: \$2,456,250
Prin. Invest. NASA Tech. Officer CASE Category
J M SCHULL HQ/G C CLAYTON 11-Astronomy
HQ/A N BUNNER

NAGW 771 University of Colorado - Boulder 2935
REMOTE SENSING ANALYSIS OF MARS
Period Obligations
06/01/1985-10/31/1996 FY94: \$100,000 TOTAL: \$331,405
Prin. Invest. NASA Tech. Officer CASE Category
B JAKOSKY HQ/J R UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 772 University of Colorado - Boulder 2936
INVESTIGATION OF IRREVERSIBLE MATERIAL EXCHANGE
Period Obligations
06/01/1985-11/30/1992 FY94: \$0 TOTAL: \$1,464,833
Prin. Invest. NASA Tech. Officer CASE Category
M L SALBY HQ/R D MCPETERS 31-Atmos Sci
HQ/M J PRATHER

NAGW 1105 University of Colorado - Boulder 2937
TELECOMMUNICATIONS POLICY, TRENDS AND TECHNOLOGY
Period Obligations
06/01/1987-12/31/1993 FY94: \$0 TOTAL: \$897,868
Prin. Invest. NASA Tech. Officer CASE Category
R BYERLY HQ/J W KIERIER 99-Multi-Discip
F S BARNES
D JUNE

NAGW 1110 University of Colorado - Boulder 2938
ALGORITHM VALIDATION FOR ALONG TRACK SCANNING
RADIOMETER
Period Obligations
06/01/1987-04/30/1995 FY94: \$184,500 TOTAL: \$898,488
Prin. Invest. NASA Tech. Officer CASE Category
W J EMERY HQ/G S LAGERLOEF 33-Oceanography
HQ/W S WILSON

NAGW 1124 University of Colorado - Boulder 2939
ALTIMETRY DATA ASSIMILATION AND NUMERICAL OCEAN
MODELING
Period Obligations
07/01/1987-03/31/1994 FY94: \$0 TOTAL: \$897,848
Prin. Invest. NASA Tech. Officer CASE Category
G BORN HQ/G S LAGERLOEF 33-Oceanography
R LEBEN HQ/W S WILSON

NAGW 1176 University of Colorado - Boulder 2940
MAGNETOTAIL PARTICLE DYNAMICS AND AURORAL
Period Obligations
09/22/1987-06/30/1994 FY94: \$37,500 TOTAL: \$431,500
Prin. Invest. NASA Tech. Officer CASE Category
T W SPEISER HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1197 University of Colorado - Boulder 2941
CENTER FOR THE COMMERCIAL DEVELOPMENT
Period Obligations
10/14/1987-10/31/1994 FY94: \$1,790,000 TOTAL: \$10,030,146
Prin. Invest. NASA Tech. Officer CASE Category
M LUTTGES HQ/W A ORAN 59-Life Sci, NEC
J BERRYMAN HQ/A VILLAMIL

NAGW 1387 University of Colorado - Boulder 2942
EVOLUTION OF LARGE SCALE PLASMA STRUCTURES IN COMETS
Period Obligations
08/04/1988-03/31/1995 FY94: \$52,800 TOTAL: \$404,667
Prin. Invest. NASA Tech. Officer CASE Category
J C BRANDT HQ/J H RAHE 11-Astronomy

NAGW 1388 University of Colorado - Boulder 2943
CENTER FOR SPACE CONSTRUCTION
Period Obligations
07/20/1988-10/31/1994 FY94: \$1,550,000 TOTAL: \$9,755,542
Prin. Invest. NASA Tech. Officer CASE Category
G W MORGANTHALER HQ/M S HIRSCHBEIN 49-Engr, NEC
S STURE HQ/S C HARTMAN

NAGW 1462 University of Colorado - Boulder 2944
MAX 91 COORDINATION AND STUDIES OF SOLAR ACTIVITY
Period Obligations
10/05/1988-11/30/1994 FY94: \$63,460 TOTAL: \$335,639
Prin. Invest. NASA Tech. Officer CASE Category
A L KIPLINGER HQ/J D BOHLIN 13-Physics
HQ/S KANE

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAGW 1479 University of Colorado - Boulder 2945
THEORETICAL ASTROPHYSICS OF COSMIC ULTRAVIOLET AND X-RAY

Period	Obligations	
11/09/1988-12/31/1994	FY94: \$65,000	TOTAL: \$355,493
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M SHULL	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

NAGW 1994 University of Colorado - Boulder 2953
NAGW-1994/UNIV OF COLORADO/STUDY OF THE SOLAR CORONA USING RADIO AND SPACE OBSERVATIONS

Period	Obligations	
03/01/1990-10/31/1994	FY94: \$93,762	TOTAL: \$407,387
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G A DULK	HQ/J D BOHLIN	13-Physics
	HQ/S KANE	

NAGW 1786 University of Colorado - Boulder 2946
ARTIFICIAL INTELLIGENCE APPLICATIONS FOR SEA ICE CLASS.

Period	Obligations	
07/11/1989-03/31/1993	FY94: \$0	TOTAL: \$254,586
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J MASLANIK	HQ/R H THOMAS	33-Oceanography
J R KEY	HQ/W S WILSON	

NAGW 2070 University of Colorado - Boulder 2954
THE NATURE OF EOLIAN ACTIVITY DURING THE HOLOCENE ON THE NORTHERN HIGHPLAINS, USA

Period	Obligations	
05/04/1990-06/30/1993	FY94: \$0	TOTAL: \$318,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A GOETZ	HQ/M BALTUCK	32-Geological Sci
	HQ/T J PIEPER	

NAGW 1839 University of Colorado - Boulder 2947
APPLICATION OF SPECIAL SENSOR MICROWAVE IMAGER CSS MI DATA FOR SNOW COVER CLIMATE RESEARCH

Period	Obligations	
12/07/1989-12/31/1993	FY94: \$0	TOTAL: \$494,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R G BARRY	HQ/R H THOMAS	39-Env Sci, NEC
	HQ/W S WILSON	

NAGW 2116 University of Colorado - Boulder 2955
NAGW-2116/UNIV OF COLORADO/THERMOSPHERIC AIRGLOW MODEL DEVELOPMENT

Period	Obligations	
05/29/1990-03/31/1995	FY94: \$55,302	TOTAL: \$257,658
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S C SOLOMON	HQ/M M MELLOTT	13-Physics
	HQ/T PERRY	

NAGW 1843 University of Colorado - Boulder 2948
STUDIES OF GLOBAL SEA LEVEL AND ICE SHEET VOLUME CHANGES

Period	Obligations	
10/02/1989-12/31/1993	FY94: \$0	TOTAL: \$144,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J WAHR	HQ/N B DOUGLAS	39-Env Sci, NEC
	HQ/M BALTUCK	

NAGW 2130 University of Colorado - Boulder 2956
NAGW-2130/UNIV OF COLORADO/SME TEMPERATURE STUDIES OF THE MESOSPHERE AND UPPER STRATOSPHERE

Period	Obligations	
05/18/1990-12/31/1993	FY94: \$0	TOTAL: \$211,424
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R T CLANCY	HQ/R D MCPETERS	31-Atmos Sci
	HQ/M J PRATHER	

NAGW 1902 University of Colorado - Boulder 2949
VISUALIZATION TECHNIQUES TO AID IN ANALYSIS OF MULTI-SPECTRAL

Period	Obligations	
11/02/1989-09/30/1992	FY94:	TOTAL: \$350,232
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E W BRUGEL	HQ/J WEISS	11-Astronomy
G DOMIK/G RIEGLER		

NAGW 2158 University of Colorado - Boulder 2957
NAGW-2158/UNIV OF COLORADO/APPLICATION OF MULTISPECTRAL SATELLITE DATA IN POLAR SURFACE ENERGY FLUX

Period	Obligations	
07/13/1990-03/31/1996	FY94: \$352,128	TOTAL: \$932,165
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K STEFFEN	HQ/R H THOMAS	33-Oceanography
	HQ/W S WILSON	

NAGW 1942 University of Colorado - Boulder 2950
TEMPORAL VARIATIONS OF THE GEOPOTENTIAL

Period	Obligations	
04/26/1990-12/31/1993	FY94: \$0	TOTAL: \$194,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J WAHR	HQ/M BALTUCK	19-Phys Sci, NEC

NAGW 2248 University of Colorado - Boulder 2958
NAGW-2248/UNIV OF COLORADO "a" BOULDER/DYNAMICS OF PLANETESIMALS AND KUIPER COMET BELT

Period	Obligations	
03/11/1991-12/31/1994	FY94: \$54,000	TOTAL: \$194,201
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G R STEWART	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 1944 University of Colorado - Boulder 2951
SEQUENTIAL ESTIMATION OF REGIONAL STATION POSITIONS FOR HIGH TEMPORAL RESOLUTION

Period	Obligations	
04/26/1990-05/31/1994	FY94: \$49,971	TOTAL: \$132,971
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G ROSBOROUGH	HQ/M BALTUCK	19-Phys Sci, NEC

NAGW 2286 University of Colorado - Boulder 2959
HISTORY OF WATER ON MARS

Period	Obligations	
03/06/1991-10/31/1993	FY94: \$0	TOTAL: \$121,811
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B JAKOSKY	HQ/J M BOYCE	32-Geological Sci

NAGW 1960 University of Colorado - Boulder 2952
MAPPING ATMOSPHERIC WATER VAPOR AND ITS MOTIONS W SSMI DATA AND THE CONSEQUENCES FOR MOISTURE FLUX

Period	Obligations	
01/26/1990-12/31/1993	FY94: \$0	TOTAL: \$470,707
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W EMERY	HQ/J C DODGE	31-Atmos Sci
	HQ/A J TUYAHOV	

NAGW 2318 University of Colorado - Boulder 2960
SPATIAL AND TEMPORAL STUDIES OF MARTIAN DUST TRANSPORT

Period	Obligations	
12/28/1990-12/31/1994	FY94: \$0	TOTAL: \$129,420
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S W LEE	HQ/T A MAXWELL	32-Geological Sci

NASA'S UNIVERSITY PROGRAM **COLORADO (Continued)**

NAGW 2338 University of Colorado - Boulder 2961
STUDIES OF CIRCUMSTELLAR AND INTERSTELLAR DUST
Period *Obligations*
01/31/1991-10/31/1993 FY94: \$0 TOTAL: \$140,191
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G CLAYTON HQ/D P HUENEMOERDER 13-Physics

NAGW 2404 University of Colorado - Boulder 2962
THE COLLISIONAL ORIGIN AND EVOLUTION OF NEPTUNE'S RINGS
Period *Obligations*
03/18/1991-12/31/1993 FY94: \$0 TOTAL: \$191,630
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E COLWELL HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2438 University of Colorado - Boulder 2963
NAGW-2438/UNIV COLORADO/LABORATORY STUDIES OF LOW TEMPERATURE RATE COEFFICIENTS: THE ATMOSPHERIC
Period *Obligations*
05/23/1991-12/31/1997 FY94: \$0 TOTAL: \$207,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S R LEONE HQ/J T BERGSTRAHL 11-Astronomy

NAGW 2484 University of Colorado - Boulder 2964
A COMPREHENSIVE ANALYSIS OF IO'S TORUS AND ATMOSPHERE
Period *Obligations*
05/23/1991-01/31/1997 FY94: \$60,000 TOTAL: \$195,114
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N M SCHNEIDER HQ/W QUAIDE 11-Astronomy

NAGW 2488 University of Colorado - Boulder 2965
AEROSOL PROPERTIES OF RADIATIVE ENERGY BALANCE OF NEPTUNE
Period *Obligations*
08/07/1991-12/31/1993 FY94: \$0 TOTAL: \$98,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W R PRYOR HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2492 University of Colorado - Boulder 2966
IMAGING AND SPECTROSCOPY OF TO'S TOURS AND ATMOSPHERE
Period *Obligations*
07/25/1991-03/31/1995 FY94: \$72,000 TOTAL: \$193,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N M SCNEIDER HQ/J H RAHE 11-Astronomy

NAGW 2568 University of Colorado - Boulder 2967
NAGW-2568/UNIV COLORADO in BOULDER/DIAGNOSTICS OF THE HYDROGE LYMAN AND BALMERLINES DURING THE IMPULSI
Period *Obligations*
06/20/1991-03/31/1993 FY94: \$0 TOTAL: \$59,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L LINSKY HQ/W WAGNER 13-Physics
HQ/K LANG

NAGW 2598 University of Colorado - Boulder 2968
NAGW-2598/UNIV COLORADO/PARAMETERIZATION AND SEALING OF ARCTIC ICE CONDITIONS IN THE CONTEXT OF ICE-AT
Period *Obligations*
07/22/1991-03/31/1994 FY94: \$0 TOTAL: \$257,620
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G BARRY HQ/R H THOMAS 39-Env Sci, NEC

NAGW 2651 University of Colorado - Boulder 2969
A STUDY OF THE EARTH'S LOWER MANTLE AND UPPER CORE UTILIZING GEOMAGNETIC AND EARTH ROTATION DATA
Period *Obligations*
07/24/1991-06/30/1994 FY94: \$0 TOTAL: \$93,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F BAGENAL HQ/M BALTUCK 32-Geological Sci

NAGW 2675 University of Colorado - Boulder 2970
BL LACERTAE OBJECTS
Period *Obligations*
08/20/1991-04/30/1995 FY94: \$90,001 TOTAL: \$337,800
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J T STOCKE HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2684 University of Colorado - Boulder 2971
STUDY OF IOVIAN DECA-METRIC ARCS AND IOGENIC ALFVEN WAVES
Period *Obligations*
08/20/1991-08/31/1993 FY94: \$0 TOTAL: \$64,898
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F BAGENAL HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 2706 University of Colorado - Boulder 2972
INVERSE SEQUENTIAL PROCEDURES FOR THE MONITORING OF TIME SERIES
Period *Obligations*
09/23/1992-09/30/1995 FY94: \$0 TOTAL: \$25,087
Prin. Invest. *NASA Tech. Officer* *CASE Category*
U RADOK HQ/R A SCHIFFER 39-Env Sci, NEC
HQ/D M BUTLER

NAGW 2731 University of Colorado - Boulder 2973
NAGW-2731/UNIV COLORADO/COLLABORATIVE RESEARCH: SCALING THEORIES OF HYDROLOGY, HYDRAULICS
Period *Obligations*
09/20/1991-12/31/1994 FY94: \$65,000 TOTAL: \$203,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V K GUPTA HQ/G ASRAR 39-Env Sci, NEC
E C MEMIRE

NAGW 2744 University of Colorado - Boulder 2974
EL CHICHON AEROSOL STUDIES BASED UPON SME RADIANCE OBSERVATIONS
Period *Obligations*
09/24/1991-12/31/1993 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D W RUSCH HQ/J A KAYE 31-Atmos Sci
HQ/R E MURPHY

NAGW 2754 University of Colorado - Boulder 2975
STUDY OF THE LARGE SCALE SOLAR CORONA W/SSM CORONA GRAPH/ POLARIMETER DATA
Period *Obligations*
11/01/1991-03/31/1994 FY94: \$0 TOTAL: \$98,565
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F BAGENAL HQ/W J WAGNER 13-Physics
HQ/K LANG

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAGW 2825 University of Colorado - Boulder 2976
SME NITRIC OXIDE DATA
Period *Obligations*
01/03/1992-03/31/1996 FY94: \$65,436 TOTAL: \$187,988
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C BARTH HQ/D L REASONER 13-Physics
HQ/J D BOHLIN

NAGW 2851 University of Colorado - Boulder 2977
NAGW-2851/UNIV COLORADO/AN INVESTIGATION OF THE
IMPORTANCE OF AURORAL PRECIPITATION ON THE SOLAR
Period *Obligations*
01/31/1992-03/31/1994 FY94: \$0 TOTAL: \$84,445
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J ROWELL HQ/D L REASONER 13-Physics
HQ/J D BOHLIN

NAGW 2879 University of Colorado - Boulder 2978
ATMOSPHERIC PLUMES ON TRITON
Period *Obligations*
02/10/1992-06/30/1993 FY94: \$0 TOTAL: \$41,852
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B JAKOSKY HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2895 University of Colorado - Boulder 2979
KINETIC THEORY MODELS OF PLANETARY RINGS
Period *Obligations*
02/20/1992-02/28/1994 FY94: \$0 TOTAL: \$92,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G R STEWART HQ/J M BOYCE 32-Geological Sci

NAGW 2900 University of Colorado - Boulder 2980
THEORETICAL ANALYSIS OF SPECTRA OF SUPERNOVAE
Period *Obligations*
02/19/1992-12/31/1994 FY94: \$55,000 TOTAL: \$180,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R MCCRAY HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 2904 University of Colorado - Boulder 2981
ATMOSPHERIC DIAGNOSTICS AND MODELLING FOR STELLAR
CHROMOSPHERES AND CORONAL
Period *Obligations*
02/19/1992-12/31/1993 FY94: \$0 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BROWN HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 2948 University of Colorado - Boulder 2982
SEA ICE MOTIONS IN THE CENTRAL ARCTIC PACK ICE AS INFERRED
FROM AVHRR IMAGERY
Period *Obligations*
03/03/1992-12/31/1994 FY94: \$79,776 TOTAL: \$233,864
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W EMERY HQ/R A SCHIFFER 33-Oceanography
J A MASLANIK HQ/D M BUTLER

NAGW 2954 University of Colorado - Boulder 2983
BIB PHOTOCONDUCTIVE MIXERS
Period *Obligations*
03/03/1992-12/31/1994 FY94: \$78,000 TOTAL: \$234,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L BETZ HQ/L J CAROFF 11-Astronomy

NAGW 2968 University of Colorado - Boulder 2984
MAGNETOTAL MODELING AND SIMULATION: COMPARISON T O
OBSERVATIONS
Period *Obligations*
03/20/1992-04/30/1995 FY94: \$35,000 TOTAL: \$169,547
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I DOXAS HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 2979 University of Colorado - Boulder 2985
SPACE-TIME VARIABILITY OF TROPICAL CONVECTION
Period *Obligations*
03/20/1992-12/31/1993 FY94: \$0 TOTAL: \$140,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M L SALBY HQ/J C DODGE 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 2980 University of Colorado - Boulder 2986
HELIOSEISMOLOGY AND CONVECTION ZONE DYNAMICS
Period *Obligations*
03/10/1992-01/31/1992 FY94: \$0 TOTAL: \$65,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J TOOMRE HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

NAGW 2985 University of Colorado - Boulder 2987
EFFECT OF GLACIAL AND POLAR ICE ON SPACE GEODETIC
OBSERVATIONS
Period *Obligations*
03/16/1992-01/31/1995 FY94: \$19,089 TOTAL: \$55,558
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M WAHR HQ/R E MURPHY 32-Geological Sci
HQ/D M BUTLER

NAGW 2994 University of Colorado - Boulder 2988
ANALYSIS OF HRTS SPECTRA OF LYMAN ALPHA DURING A F LARE
AND AN ELLERMAN BOMB
Period *Obligations*
03/20/1992-03/14/1993 FY94: TOTAL: \$19,807
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K GAYLEY HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

NAGW 2995 University of Colorado - Boulder 2989
MICROWAVE SPECTROSCOPIC STDS OF PLANETARY ATMOSPHE
RE
Period *Obligations*
03/20/1992-02/28/1995 FY94: \$58,000 TOTAL: \$164,317
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R T CLANCY HQ/W L QUAIDE 11-Astronomy

NAGW 3016 University of Colorado - Boulder 2990
RELATIVE PROTONS AND THE HIGH-ENERGY SPECTRA OF AG NS
Period *Obligations*
03/20/1992-03/31/1995 FY94: \$30,000 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M C BEGELMAN HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 3030 University of Colorado - Boulder 2991
A DIGITAL ARCHIVAL SYSTEM FOR SOLAR IMAGES
Period *Obligations*
04/03/1992-11/30/1992 FY94: \$0 TOTAL: \$17,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A KIPLINGER HQ/W J WAGNER 13-Physics
HQ/J D BOHLIN

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAGW 3034 University of Colorado - Boulder 2992
THE CORE-MANTLE BOUNDARY AND THE ROTATION OF THE EARTH

Period	Obligations	
04/03/1992-12/31/1994	FY94: \$39,000	TOTAL: \$111,550
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M WAHR	HQ/R E MURPHY	32-Geological Sci
	HQ/D M BUTLER	

NAGW 3047 University of Colorado - Boulder 2993
ANALYSIS OF GLOBAL CLOUD IMAGERY FROM MULTIPLE SATELLITES

Period	Obligations	
04/17/1992-03/31/1994	FY94: \$0	TOTAL: \$250,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M L SALBY	HQ/J C DODGE	31-Atmos Sci
	HQ/R A SCHIFFER	

NAGW 3177 University of Colorado - Boulder 2994
ISO KEY PROJECT OBSERVATIONS

Period	Obligations	
08/14/1992-08/31/1993	FY94: \$0	TOTAL: \$31,410
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R E STENCEL	HQ/L J CAROFF	11-Astronomy

NAGW 3192 University of Colorado - Boulder 2995
NAGW-3192/UNIV COLORADO/PULSATION, SHOCKS, MASS LOSS AND DUST: ATMOSPHERES OF LONG PERIOD VARIABLES

Period	Obligations	
09/17/1992-06/30/1994	FY94: \$0	TOTAL: \$188,211
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E BRUGEL	HQ/G R RIEGLER	11-Astronomy

NAGW 3196 University of Colorado - Boulder 2996
NAGW-3196/UNIV COLORADO/A DIRECTED SEARCH FOR EXTRATERRESTRIAL LASER SIGNALS

Period	Obligations	
08/21/1992-06/30/1994	FY94: \$0	TOTAL: \$151,700
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A L BETZ	HQ/J D RUMMEL	11-Astronomy

NAGW 3224 University of Colorado - Boulder 2997
NAGW-3224/UNIV COLORADO @ BOULDER/AUTOMATIC AVHRR IMAGE NAVIGATION SOFTWARE

Period	Obligations	
10/27/1992-10/14/1993	FY94: \$0	TOTAL: \$20,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W EMERY	HQ/M M MAIDEN	39-Env Sci, NEC
	HQ/D M BUTLER	

NAGW 3261 University of Colorado - Boulder 2998
ACCELERATED DEVELOPMENT OF AN SSM/I EARTH GRID AS A CANDIDATE FOR THE SSM/I PATHFINDER BENCHMARK GRID

Period	Obligations	
11/16/1992-04/30/1994	FY94: \$0	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R ARMSTRONG	HQ/M E MAIDEN	33-Oceanography
	HQ/D M BUTLER	

NAGW 3271 University of Colorado - Boulder 2999
MAGNETOSPHERIC AND SOLAR RADIATION EFFECTS ON THE TUNIAN RINGS

Period	Obligations	
11/13/1992-12/31/1993	FY94: \$0	TOTAL: \$61,716
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HORANYI	HQ/J T BERGSTRALH	19-Phys Sci, NEC

NAGW 3284 University of Colorado - Boulder 3000
NAGW-3284/UNIV COLORADO/RESTORATION OF THE COLORADO SCALE MODEL SOLAR SYSTEM

Period	Obligations	
12/04/1992-07/31/1993	FY94: \$0	TOTAL: \$5,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T R AYRES	HQ/L S LAPIANA	11-Astronomy
	HQ/G P NEWTON	

NAGW 3355 University of Colorado - Boulder 3001
NAGW-3355/UNIV COLORADO @ BOULDER/DUST PLASMA INTERACTION

Period	Obligations	
01/27/1993-02/28/1995	FY94: \$50,000	TOTAL: \$128,460
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M HORANYI	HQ/E C WHIPPLE	13-Physics
	HQ/G WITHROE	

NAGW 3370 University of Colorado - Boulder 3002
AN ULTRAVIOLET IMAGING SPECTROMETER FOR THE PLUTO/CHARO MISSION

Period	Obligations	
02/05/1993-03/31/1995	FY94: \$163,410	TOTAL: \$280,658
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W A MCCLINTOCK	HQ/H C BRINTON	19-Phys Sci, NEC

NAGW 3437 University of Colorado - Boulder 3003
ICE SUR. TEMP. RETR. FR. AVHRR, ATSR, AND PASS. MICR. SATE. DATA;ALG. DEVE. AND APPL.

Period	Obligations	
03/10/1993-03/31/1996	FY94: \$185,037	TOTAL: \$257,688
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J KEY	HQ/R H THOMAS	39-Env Sci, NEC
J MASLANIK	HQ/R A SCHIFFER	

NAGW 3482 University of Colorado - Boulder 3004
UNIV COLORADO BOULDER/EVOLUTION OF THE ATMOSPHERE AND SURFACE OF VENUS

Period	Obligations	
04/08/1993-03/31/1995	FY94: \$28,800	TOTAL: \$68,800
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D H GRINSPOON	HQ/J T BERGSTRALH	31-Atmos Sci

NAGW 3485 University of Colorado - Boulder 3005
INVESTIGATION OF DYNAMICAL AND CHEMICAL BEHAVIOR OF THE LOWER STRATOSPHERE AND INTERACTIONS

Period	Obligations	
06/16/1993-05/31/1996	FY94: \$85,000	TOTAL: \$195,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M L SALBY	HQ/J A KAYE	31-Atmos Sci

NAGW 3530 University of Colorado - Boulder 3006
AN INVEST. OF THE MID. STR. OF GEO. STORM EFF. IN THE THERM. ION.

Period	Obligations	
04/22/1993-02/28/1995	FY94: \$62,845	TOTAL: \$122,205
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M CODRESCU	HQ/M M MELLOTT	13-Physics
	HQ/G L WITHBROE	

NAGW 3554 University of Colorado - Boulder 3007
TOWARD A THEORY OF BROAD ABSORPTION LINE QUASARS

Period	Obligations	
04/29/1993-11/30/1994	FY94: \$0	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M C BEGELMAN	HQ/H R MILLER	11-Astronomy
	HQ/E J WEILER	

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAGW 3584 University of Colorado - Boulder 3008
THEORETICAL STUDIES OF THE DISTRIBUTION AND EVALUATION
OF WATER IN THE ATMOSPHERE OF VENUS
Period *Obligations*
05/12/1993-05/14/1995 FY94: \$50,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H GRINSPOON HQ/M C BRINTON 19-Phys Sci, NEC

NAGW 3593 University of Colorado - Boulder 3009
HIGH RESOLUTION SPECTROSCOPY WITH HOLOGRAPHIC GRAT
INGS
Period *Obligations*
05/20/1993-12/31/1994 FY94: \$45,000 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C GREEN HQ/R STACHNIK 11-Astronomy
HQ/E WEILER

NAGW 3600 University of Colorado - Boulder 3010
COMPARISON OF INTERPLANETARY AND INTERSTELLAR GRAI NS
Period *Obligations*
06/09/1993-05/31/1996 FY94: \$18,000 TOTAL: \$33,914
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T P SNOW HQ/J A NUTH III 19-Phys Sci, NEC

NAGW 3609 University of Colorado - Boulder 3011
REMOTE SENSING OF MARTIAN AEROSOLS
Period *Obligations*
05/26/1993-05/31/1994 FY94: \$0 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L W ESPOSITO HQ/J T BERGSTRALH 31-Atmos Sci

NAGW 3667 University of Colorado - Boulder 3012
EXPLORATIONS IN SCIENCE AND ASTRONOMY EDUCATION
Period *Obligations*
06/25/1993-04/30/1995 FY94: \$95,939 TOTAL: \$244,936
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BENNETT HQ/C MORROW 11-Astronomy
HQ/G P NEWTON

NAGW 3768 University of Colorado - Boulder 3013
DEVELOPMENT AND PRODUCTION OF SSM/I GRIDDED BRIGHT
NESS TEMP AND GEOPHYSICAL PRODS FOR PATHFINDER
Period *Obligations*
09/23/1993-07/31/1994 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ARMSTRONG HQ/M E MAIDEN 33-Oceanography
HQ/D M BUTLER

NAGW 3790 University of Colorado - Boulder 3014
GEOSTATISTICAL STRUCTURE ANALYSIS AND HIGH RESOLUT ION
MAPPING
Period *Obligations*
10/06/1993-08/31/1994 FY94: \$24,400 TOTAL: \$24,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
U C HERZFELD HQ/R H THOMAS 39-Env Sci, NEC
HQ/J S THEON

NAGW 3838 University of Colorado - Boulder 3015
NAGW-3838/B UNIV. COLORADO: 'WHAT DRIVES THE OUTFLOWS
IN BROAD ABSORPTION LINE QSOS?'
Period *Obligations*
12/21/1993-03/31/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M C BEGELMAN HQ/R V ISTACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3868 University of Colorado - Boulder 3016
NAGW-3868/B UNIV. OF CO/BOULDER 'COMPREHENSIVE ASS ESS
OF NASA'S PERSPEC. FROM SPACE POSTER PROJECT
Period *Obligations*
02/14/1994-11/14/1994 FY94: \$30,701 TOTAL: \$30,701
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BENNETT HQ/M V PHELPS 99-Multi-Discip

NAGW 3887 University of Colorado - Boulder 3017
UNIV COLORADO: GEOMETRY AND GRAPHICS SOFTWARE FOR PL
ANETARY SCIENCE OBSERVATIONS
Period *Obligations*
03/03/1994-03/15/1995 FY94: \$82,966 TOTAL: \$82,966
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K E SIMMONS HQ/G H MUCKLOW 22-Computer Science
HQ/J H BREDECAMP

NAGW 3898 University of Colorado - Boulder 3018
NAGW-3898/B UNIV. OF COLORADO/BOUL 'PLANETARIUM AL
LSKIES' 12-MONTH AWARD
Period *Obligations*
03/30/1994-04/30/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A HAMILTON HQ/R A MULKEY 11-Astronomy
HQ/G R RIEGLER

NAGW 3919 University of Colorado - Boulder 3019
NAGW-3919/B UNIV. COLORADO/BOULDER 'INTERNET ACCES S TO
GOES—AND GAC AVHRRR DATA' 24-MO MULTI YR AWR
Period *Obligations*
04/21/1994-03/31/1995 FY94: \$150,000 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W EMERY HQ/J C DODGE 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 3961 University of Colorado - Boulder 3020
DYNAMICAL MODELS OF SOLAR SYSTEM FORMATION AND EVO
LUTION
Period *Obligations*
05/10/1994-02/28/1997 FY94: \$52,000 TOTAL: \$52,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G STEWART HQ/R WILLIAMS 32-Geological Sci

NAGW 3995 University of Colorado - Boulder 3021
THE EVOLUTION OF THE MARTIAN ATMOSPHERE
Period *Obligations*
05/14/1994-02/28/1997 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B JAKOSKY HQ/J BERGSTRALH 31-Atmos Sci

NAGW 3997 University of Colorado - Boulder 3022
DETERMINATION AND APPLICATIONS OF SATELLITE-DERIVE D
ATMOSPHERIC WATER CHARACTERISTICS
Period *Obligations*
05/14/1994-03/31/1995 FY94: \$126,413 TOTAL: \$126,413
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A CURRY HQ/J C DODGE 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 4064 University of Colorado - Boulder 3023
SUBARCSECOND IMAGING OF THE SOLAR CORONA IN THE 0. 5-2.0
KEV BANDPASS
Period *Obligations*
07/21/1994-06/30/1995 FY94: \$150,000 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J GALLAGHER HQ/W J WAGNER 13-Physics

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAGW 4082 University of Colorado - Boulder 3024
CHONRULE FORMATION IN LIGHTNING
Period *Obligations*
07/14/1994-05/31/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M HORANYI HQ/P ROGERS 11-Astronomy

NAGW 4145 University of Colorado - Boulder 3025
JMEX/SAC-D DEFINITION STUDY
Period *Obligations*
09/28/1994-09/30/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N SCHNEIDER HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 4146 University of Colorado - Boulder 3026
ESTIMATION AND ANALYSIS OF PRECIPITATION OVER THE TROPICAL PACIFIC
Period *Obligations*
09/28/1994-06/30/1997 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S AVERY HQ/J C DODGE 31-Atmos Sci
J CURRY HQ/R A SCHIFFER

NAS 5-27263 University of Colorado - Boulder 3027
PERFORM A STUDY OF THE RESPONSE OF UPPER ATMOSPHERE PARAMETERS TO VARIATIONS IN SOLAR ACTIVITY
Period *Obligations*
07/07/1982-09/30/1995 FY94: \$160,000 TOTAL: \$976,857
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LONDON GSFC/C REBER 31-Atmos Sci

NAS 5-27750 University of Colorado - Boulder 3028
DELIVER A PROTOFLIGHT SOLSTICE INSTRUMENT FOR THE UARS
Period *Obligations*
09/26/1983-06/30/1994 FY94: \$0 TOTAL: \$10,282,350
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G ROTTMAN GSFC/N PETERSKI 31-Atmos Sci
GSFC/J DONLEY

NAS 5-31355 University of Colorado - Boulder 3029
COMPUTER RESEARCH
Period *Obligations*
07/10/1991-07/09/1994 FY94: \$0 TOTAL: \$164,760
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E HANSEN GSFC/H BURRITT 22-Computer Science
GSFC/J BREDEKAMP

NAS 5-31711 University of Colorado - Boulder 3030
EOS INVESTIGATION: HIGH-RESOLUTION IMAGING SPECTROMETER (HIRIS)-TEAM LEADER
Period *Obligations*
02/24/1992-12/14/2001 FY94: \$200,000 TOTAL: \$1,123,545
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A GOETZ GSFC/H BLODGET 31-Atmos Sci

NAS 5-31715 University of Colorado - Boulder 3031
HIGH RESOLUTION IMAGING SPECTROMETER (HIRIS) INVESTIGATION
Period *Obligations*
01/14/1992-12/12/2001 FY94: \$150,000 TOTAL: \$560,036
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C WESSMAN GSFC/T BRAKE 31-Atmos Sci

NAS 5-31860 University of Colorado - Boulder 3032
RESEARCH SOFTWARE DEVELOPMENT UNDER NRA 91-OSSA-19 ADP PROGRAM.
Period *Obligations*
09/30/1992-09/29/1995 FY94: \$90,000 TOTAL: \$265,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B DOMIK GSFC/R J OLIVERSON 11-Astronomy

NAS 5-32392 University of Colorado - Boulder 3033
OPERATION OF SNOW AND ICE DISTRIBUTED ACTIVE ARCHIVE CENTER.
Period *Obligations*
04/19/1993-01/31/1998 FY94: \$2,038,000 TOTAL: \$3,576,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G BARRY GSFC/G HUNOLT 42-Astro Engr

NAS 5-32568 University of Colorado - Boulder 3034
PHASE B-INVESTIGATION - TIMED INSTRUMENT - TONE
Period *Obligations*
09/15/1993-09/30/1994 FY94: \$85,000 TOTAL: \$210,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D W RUSCH GSFC/B CAMPBELL 31-Atmos Sci

NAS 8-31958 University of Colorado - Boulder 3035
STUDY OF GEOPHYSICAL FLUID DYNAMICS WITH ELECTRO - HYDRODYNAMICS POLARIZATION FORCES.
Period *Obligations*
03/26/1976-09/30/1996 FY94: \$279,281 TOTAL: \$2,918,718
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E HART MSFC/G HALL 19-Phys Sci, NEC
J TOOMRE MSFC/G H FICHTL

NAS 8-38779 University of Colorado - Boulder 3036
MECHANICS OF GRANULAR MATERIALS MICROGRAVITY
Period *Obligations*
09/24/1992-09/30/1997 FY94: \$661,000 TOTAL: \$927,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S STURE MSFC/G E HALL 47-Materials Engr

NASW 4873 University of Colorado - Boulder 3037
NEW AWARD FOR INSTEP PROGRAM PHASE A
Period *Obligations*
06/27/1994-03/31/1995 FY94: \$113,185 TOTAL: \$113,185
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L D PETERSON HQ/A B DOUGHERTY 42-Astro Engr
M S LAKE

NASW 4879 University of Colorado - Boulder 3038
BASIC RESEARCH ON MODULAR ISOLATION MICROGRAVITY EXPERIMENT
Period *Obligations*
05/12/1994-02/11/1995 FY94: \$108,047 TOTAL: \$108,047
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D LAWRENCE HQ/J LANDERS 41-Aero Engr

NCA 2-713 University of Colorado - Boulder 3039
RESEARCH ON PLANT GROWTH SYSTEM SUPPORT DURING LONG-TERM SPACEFLIGHT
Period *Obligations*
04/17/1992-01/31/1995 FY94: \$10,000 TOTAL: \$49,920
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M W LUTTGES ARC/M KLISS 51-Biological Sci
ARC/R D MACELROY

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NCA 2-759 University of Colorado - Boulder 3040
COMMERCIAL ANIMAL BIOTECHNOLOGY SPACE FLIGHTS
Period *Obligations*
10/28/1992-04/30/1994 FY94: \$0 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M LUTTGES ARC/D GOLDWATER 56-Medical Sciences

NCA 2-788 University of Colorado - Boulder 3041
DESIGN AND FABRICATION OF HIGH-SPEED METAL-SEMICONDUCTOR-METAL PHOTODETECTOR FOR PLANT CANOPY ARCHITECTURE
Period *Obligations*
02/05/1993-02/14/1994 FY94: \$0 TOTAL: \$14,929
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J VANZEGHHBROECK ARC/V C VANDERBILT 45-Elec Engr

NCA 2-823 University of Colorado - Boulder 3042
CHLORINE ABUNDANCE IN THE LOWER ATMOSPHERE OF VENUS
Period *Obligations*
06/03/1993-01/31/1994 FY94: \$0 TOTAL: \$12,990
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H GRINSPOON ARC/J B POLLACK 31-Atmos Sci

NCC 1-143 University of Colorado - Boulder 3043
A STUDY OF THE VARIATION OF NITROGEN DIOXIDE USING SME AND SAGE DATA.
Period *Obligations*
06/07/1990-12/31/1993 FY94: \$0 TOTAL: \$150,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D W RUSCH LARC/J M ZAWODNY 31-Atmos Sci
G E THOMAS

NCC 2-842 University of Colorado - Boulder 3044
HIGH SPATIAL RESOLUTION SURFACE MODELS FROM THE INTEGRATION OF REPEAT LOW RESOLUTION SATELLITE.....
Period *Obligations*
01/27/1994-09/30/1994 FY94: \$95,025 TOTAL: \$95,025
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W J EMERY ARC/P E FRIEDLAND 22-Computer Science

NCC 2-5014 University of Colorado - Boulder 3045
A COMPUTATIONAL STUDY OF FLUID-STRUCTURE COUPLING IN JUNCTURE FLOWS
Period *Obligations*
12/21/1993-12/31/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S BIRINGEN ARC/T HOLST 41-Aero Engr

NCC 2-5067 University of Colorado - Boulder 3046
OPTICAL DESIGN OF PLANT CANOPY ARCHITECTURE MEASUREMENT INSTRUMENT AND FABRICATION OF TWO DIMENSIONAL.....
Period *Obligations*
06/08/1994-05/31/1995 FY94: \$14,995 TOTAL: \$14,995
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J VAN ZEGHHBROECK ARC/V C VANDERBILT 45-Elec Engr

NCC 3-168 University of Colorado - Boulder 3047
NUMERICAL STUDY OF COMPRESSIBLE BOUNDARY-LAYER TRANSMISSION BETWEEN TWO CONCENTRIC CYLINDERS
Period *Obligations*
03/16/1990-10/31/1993 FY94: \$0 TOTAL: \$176,627
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C Y CHOW LERC/M S LIOU 41-Aero Engr

NCC 3-210 University of Colorado - Boulder 3048
FLUID DYNAMICS AND SOLIDIFICATION OF METALLIC MELTS: SURFACE TENSION GRADIENT EFFECTS
Period *Obligations*
03/06/1991-09/30/1994 FY94: \$0 TOTAL: \$258,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J KOSTER LERC/F P CHIARAMONTE 47-Materials Engr

NCC 3-272 University of Colorado - Boulder 3049
OFF AXIS DRAG OF DENDRITE FRAGMENTS AT LOW REYNOLDS NUMBER
Period *Obligations*
07/15/1992-08/31/1994 FY94: \$0 TOTAL: \$28,199
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P D WEIDMAN LERC/H C DEGRON 47-Materials Engr
LERC/T GLASGOW

NCC 5-67 University of Colorado - Boulder 3050
A STUDY OF GPS MEASUREMENT ERRORS DUE TO NOISE AND MULTIPATH INTERFERENCE
Period *Obligations*
04/14/1994-02/14/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P AXELRAD GSFC/S KANT 41-Aero Engr
P MACDORAN

NCCW 37 University of Colorado - Boulder 3051
UNIV COLORADO DISTRIBUTION AND AUTOMATION TECHNOLOGY ADVANCEMENT
Period *Obligations*
02/17/1994-02/28/1995 FY94: \$45,357 TOTAL: \$45,357
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R R HANSEN HQ/R A GUALDONI 41-Aero Engr

NGT 00-030-023 University of Colorado - Boulder 3052
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
11/20/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S D PECKHAM HQ/G ASRAR 39-Env Sci, NEC

NGT 00-030-060 University of Colorado - Boulder 3053
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/16/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L CHEN HQ/D M BUTLER 31-Atmos Sci
J LONDON HQ/G S WILSON

NGT 00-030-095 University of Colorado - Boulder 3054
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/06/1991-05/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T SEASTEDT HQ/D BUTLER 39-Env Sci, NEC

NGT 00-030-097 University of Colorado - Boulder 3055
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/21/1992-08/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A ALAM HQ/G ASRAR 39-Env Sci, NEC
J CURRY HQ/J S THEON

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NGT 00-030-102 University of Colorado - Boulder 3056
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/30/1992-08/31/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
T P HARTSELL HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-131 University of Colorado - Boulder 3057
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/21/1992-08/31/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
M J MILLS HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-030-132 University of Colorado - Boulder 3058
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/21/1992-08/31/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
A M MIDDLEBROOK HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-030-133 University of Colorado - Boulder 3059
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/30/1992-08/31/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R VILLALBA HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-139 University of Colorado - Boulder 3060
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/30/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R J GOSNELL HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-175 University of Colorado - Boulder 3061
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1993-08/31/1995 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
A F GOETZ HQ/G ASRAR 32-Geological Sci
HQ/D M BUTLER

NGT 00-030-187 University of Colorado - Boulder 3062
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1993-08/31/1995 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
M SALBY HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-205 University of Colorado - Boulder 3063
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1993-08/31/1995 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D J HOFMANN HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-206 University of Colorado - Boulder 3064
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1993-08/31/1995 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
A R RAVISHANKARA HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-207 University of Colorado - Boulder 3065
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1993-08/31/1995 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
G H BORN HQ/G ASRAR 39-Env Sci, NEC

NGT 00-030-210 University of Colorado - Boulder 3066
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1993-08/31/1995 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R K MONSON HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-040-008 University of Colorado - Boulder 3067
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
10/19/1989-01/31/1995 FY94: \$380,000 TOTAL: \$1,868,000
Prin. Invest. NASA Tech. Officer CASE Category
E R HANSEN HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-515 University of Colorado - Boulder 3068
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/06/1989-02/28/1993 FY94: TOTAL: \$61,836
Prin. Invest. NASA Tech. Officer CASE Category
T P SNOW HQ/F C OWENS 13-Physics

NGT 00-050-518 University of Colorado - Boulder 3069
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/28/1989-12/31/1992 FY94: TOTAL: \$60,419
Prin. Invest. NASA Tech. Officer CASE Category
W BLUMEN HQ/F C OWENS 31-Atmos Sci

NGT 00-050-592 University of Colorado - Boulder 3070
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1990-08/24/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
K M JOHNSON HQ/F C OWENS 45-Elec Engr

NGT 00-050-660 University of Colorado - Boulder 3071
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/11/1990-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
T P SNOW HQ/F C OWENS 13-Physics

NGT 00-050-678 University of Colorado - Boulder 3072
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/09/1990-06/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R CHASE HQ/F C OWENS 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NGT 00-050-692 University of Colorado - Boulder 3073
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/12/1991-09/30/1994 FY94: \$0 TOTAL: \$77,000
Prin. Invest NASA Tech. Officer CASE Category
G H BORN HQ/F C OWENS 41-Aero Engr

NGT 00-050-899 University of Colorado - Boulder 3082
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/28/1992-06/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
R A MCCRAY GSFC/G SOFFEN 13-Physics

NGT 00-050-709 University of Colorado - Boulder 3074
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
M M MIKULAS HQ/F C OWENS 42-Astro Engr

NGT 00-050-909 University of Colorado - Boulder 3083
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/29/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
J T STOCKE HQ/J ALEXANDER 31-Atmos Sci

NGT 00-050-728 University of Colorado - Boulder 3075
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-07/27/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
A F GOETZ HQ/F C OWENS 19-Phys Sci, NEC

NGT 00-050-915 University of Colorado - Boulder 3084
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/30/1992-07/01/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
W HAY HQ/J ALEXANDER 33-Oceanography

NGT 00-050-759 University of Colorado - Boulder 3076
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/20/1991-06/30/1995 FY94: \$22,000 TOTAL: \$88,000
Prin. Invest NASA Tech. Officer CASE Category
G BORN HQ/F C OWENS 42-Astro Engr

NGT 00-050-916 University of Colorado - Boulder 3085
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/29/1992-08/14/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
F BAGENAL HQ/J ALEXANDER 13-Physics

NGT 00-050-761 University of Colorado - Boulder 3077
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/20/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
G ROSBOROUGH HQ/F C OWENS 42-Astro Engr

NGT 00-050-923 University of Colorado - Boulder 3086
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/22/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
M TOLBERT HQ/J ALEXANDER 12-Chemistry

NGT 00-050-809 University of Colorado - Boulder 3078
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
P S CONTI HQ/J ALEXANDER 11-Astronomy

NGT 00-050-934 University of Colorado - Boulder 3087
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/18/1992-06/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
C BARTH GSFC/J DURNING 42-Astro Engr

NGT 00-050-813 University of Colorado - Boulder 3079
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
W C CASH HQ/F C OWENS 11-Astronomy

NGT 00-050-954 University of Colorado - Boulder 3088
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/11/1992-06/30/1995 FY94: \$17,000 TOTAL: \$61,000
Prin. Invest NASA Tech. Officer CASE Category
L D PETERSON MSFC/F SIX 41-Aero Engr

NGT 00-050-872 University of Colorado - Boulder 3080
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/15/1992-08/16/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
R CULP JSC/S GOLDSTEIN 41-Aero Engr

NGT 00-050-955 University of Colorado - Boulder 3089
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
01/01/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
W C CASH HQ/J K ALEXANDER 13-Physics

NGT 00-050-887 University of Colorado - Boulder 3081
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
04/28/1992-08/14/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
G H BAM JPL/H ASHKENAS 41-Aero Engr

NGT 00-050-958 University of Colorado - Boulder 3090
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/17/1992-08/19/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
E ZWIBEL HQ/J K ALEXANDER 13-Physics

NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)

NGT 00-050-985 University of Colorado - Boulder 3091
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/24/1992-07/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 S BIRINGEN LARC/E PRIOR 41-Aero Engr

NGT 00-051-034 University of Colorado - Boulder 3092
 GRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period Obligations
 07/07/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 D E SMITH GSFC/G SOFFEN 41-Aero Engr

NGT 00-051-040 University of Colorado - Boulder 3093
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/05/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 R R LEBEN JPL/C HIX 41-Aero Engr

NGT 00-051-091 University of Colorado - Boulder 3094
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/25/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 N M SCHNEIDER HQ/D HOLLAND 11-Astronomy

NGT 00-051-128 University of Colorado - Boulder 3095
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/14/1993-08/22/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 R LEBEN HQ/G LESANE 41-Aero Engr

NGT 00-051-135 University of Colorado - Boulder 3096
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/19/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 M A TOLBERT HQ/G LESANE 12-Chemistry

NGT 00-051-141 University of Colorado - Boulder 3097
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/13/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 G BORN HQ/G LESANE 41-Aero Engr

NGT 00-051-179 University of Colorado - Boulder 3098
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/02/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 J N KOSTER MSFC/B SWINFORD 41-Aero Engr

NGT 00-051-206 University of Colorado - Boulder 3099
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/06/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 R FREHLICH MSFC/F SIX 45-Elec Engr

NGT 00-051-224 University of Colorado - Boulder 3100
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 M A TOLBERT HQ/A NOVOTNY 31-Atmos Sci

NGT 00-051-227 University of Colorado - Boulder 3101
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/16/1994-08/23/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 P AXELRAD GSFC/G SOFFEN 41-Aero Engr

NGT 00-051-257 University of Colorado - Boulder 3102
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/14/1994-08/23/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 A MICHELSON LARC/L EVANS 45-Elec Engr

NGT 00-051-271 University of Colorado - Boulder 3103
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 B M ARGROW GSFC/G SOFFEN 41-Aero Engr

NGT 00-051-283 University of Colorado - Boulder 3104
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 J GREEN HQ/D HOLLAND 11-Astronomy

NGT 00-051-291 University of Colorado - Boulder 3105
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/28/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 J STOCKE HQ/D HOLLAND 11-Astronomy

NGT 00-051-294 University of Colorado - Boulder 3106
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 D H GRINSPOON ARC/M MOORE 11-Astronomy

NGT 00-051-297 University of Colorado - Boulder 3107
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/28/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 G W MORGENTHAUER HQ/D HOLLAND 41-Aero Engr

NGT 00-070-220 University of Colorado - Boulder 3108
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 06/04/1991-06/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 J T STOCKE HQ/F C OWENS 13-Physics

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NGT 00-070-242 University of Colorado - Boulder 3109
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/25/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M W LUTTGES HQ/F C OWENS 41-Aero Engr

NGT 00-070-266 University of Colorado - Boulder 3110
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
05/15/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G W ROSBOROUGH HQ/D K RUSSELL 41-Aero Engr

NGT 00-070-291 University of Colorado - Boulder 3111
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
07/01/1992-06/30/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C E FOSHA HQ/J T LYNCH 45-Elec Engr

NGT 00-070-301 University of Colorado - Boulder 3112
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
11/27/1992-07/31/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D G MEYER LERC/F MONTEGRANI 45-Elec Engr

NGT 00-070-389 University of Colorado - Boulder 3113
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/23/1994-06/30/1997 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R D CULP HQ/D K RUSSELL 33-Oceanography

NSG-5103 University of Colorado - Boulder 3114
ROCKET RESEARCH IN THE ULTRAVIOLET AIRGLOW AND AURORA
OF PLANETARY ATMOSPHERE
Period *Obligations*
02/01/1976-03/31/1994 FY94: TOTAL: \$3,987,406
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C A BARTH GSFC/L J EARLY 19-Phys Sci, NEC
D D HATHAWAY GSFC/R H PLESS

NSG-5300 University of Colorado - Boulder 3115
RESEARCH OF STELLAR WIND VARIABILITY IN ALPHA CAM USING
ULTRAVIOLET DATA FROM IUE
Period *Obligations*
09/15/1978-08/31/1994 FY94: \$1,500 TOTAL: \$825,965
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T P SNOW JR GSFC/D WEST 11-Astronomy
C L JOSEPH
E B JENKINS

NSG-5303 University of Colorado - Boulder 3116
ULTRAVIOLET MEASUREMENTS WITH HIGH SPECTRAL
RESOLUTION
Period *Obligations*
09/15/1978-11/30/1994 FY94: \$460,000 TOTAL: \$5,462,889
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T P SNOW JR. GSFC/L J EARLY 11-Astronomy
W E MCCLINTOCK GSFC/R H PLESS
W C CASH

NAG 1-1444 University of Colorado - Denver 3117
ADAPTIVE CONTROL STRATEGIES FOR FLEXIBLE ROBOTIC ARM
Period *Obligations*
07/13/1992-11/14/1994 FY94: \$0 TOTAL: \$44,639
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J T BIALASIEWICZ LARC/D I SOLOWAY 45-Elec Engr

NAG 1-1537 University of Colorado - Denver 3118
IMPLICIT AND MULTIGRID DIRECT NUMERICAL SIMULATION OF
BOUNDARY-LAYER TRANSITION AND 3-D GENERAL GEO
Period *Obligations*
07/28/1992-07/27/1994 FY94: \$1 TOTAL: \$36,984
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C LIU LARC/R D JOSLIN 41-Aero Engr

NAG 1-1336 University of Denver 3119
UNIVERSITY OF DENVER CORRELATIVE MEASUREMENTS IN
SUPPORT OF THE UARS
Period *Obligations*
09/04/1991-12/31/1994 FY94: \$156,718 TOTAL: \$854,241
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D G MURCRAY LARC/J G WELLS 31-Atmos Sci
H E ROCHE

NAG 1-1450 University of Denver 3120
PLATE WAVE ACOUSTIC EMISSION IN COMPOSITE MATERIALS NLPN
92-803
Period *Obligations*
08/28/1992-08/27/1993 FY94: \$0 TOTAL: \$83,040
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M R GORMAN LARC/W H PROSSER 47-Materials Engr

NAG 2-351 University of Denver 3121
INFRARED MEASUREMENTS OF ATMOSPHERIC CONSTITUENTS
Period *Obligations*
12/12/1985-12/31/1994 FY94: \$413,063 TOTAL: \$3,654,818
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D G MURCRAY ARC/E P CONDON 31-Atmos Sci

NAG 2-458 University of Denver 3122
COUNTING CONDENSATION NUCLEI IN THE ANARTIC OZONE
MISSION
Period *Obligations*
05/01/1987-12/31/1993 FY94: \$9,000 TOTAL: \$825,573
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C WILSON ARC/S S WEGENER 31-Atmos Sci
ARC/B C CONDON

NAG 3-1609 University of Denver 3123
MICROGRAVITY HEAT TRANSFER MECHANISMS IN THE NUCLE ATE
POOL BOILING AND CRITICAL HEAT FLUX REIMES
Period *Obligations*
05/24/1994-05/23/1995 FY94: \$49,971 TOTAL: \$49,971
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J KIM LERC/J B MCQUILLEN 49-Engr, NEC
C A MOORE

**NASA'S UNIVERSITY PROGRAM
COLORADO (Continued)**

NAG 5-2094 University of Denver 3124
ROSAT SPECTRA OF SYMBIOTIC NOVAE: HOW HARD ARE THESE
SOFT SOURCES?
Period Obligations
09/15/1992-09/14/1994 FY94: \$0 TOTAL: \$31,000
Prin. Invest. NASA Tech. Officer CASE Category
R E STENCEL HQ/R PETRE 11-Astronomy

NAG 5-2103 University of Denver 3125
FIFTEENTH EPISODE MONITORING OF LONG PERIOD ECLIPSING
SYSTEMS AND INTERSYSTEM COLLISIONS
Period Obligations
10/08/1992-03/31/1995 FY94: \$56,280 TOTAL: \$84,000
Prin. Invest. NASA Tech. Officer CASE Category
R E STENCEL GSFC/D WEST 11-Astronomy

NAG 5-2368 University of Denver 3126
HIGH RESOLUTION SPECTROGRAPH/GTO OBSERVATIONS OF EVOLVED
STAR INTERACTING BINARIES
Period Obligations
09/30/1993-09/30/1995 FY94: \$18,045 TOTAL: \$18,045
Prin. Invest. NASA Tech. Officer CASE Category
R E STENCEL GSFC/K G CARPENTER 11-Astronomy
GSFC/A M SMITH

NAGW 3680 University of Denver 3127
ISO OBSERVATIONS OF CIRCUMSTELLAR DISKS: CLUES TO THE
BIRTH AND DEATH OF PLANETS
Period Obligations
08/03/1993-05/31/1995 FY94: \$60,000 TOTAL: \$91,261
Prin. Invest. NASA Tech. Officer CASE Category
R E STENCEL HQ/L J CAROFF 11-Astronomy

NAS 5-29311 University of Denver 3128
MEASUREMENT OF X-RAYS AND INTERGALACTIC ELECTRONS IN VLF
TRIGGER EXPERIMENTS
Period Obligations
01/28/1986-01/27/1995 FY94: \$0 TOTAL: \$138,975
Prin. Invest. NASA Tech. Officer CASE Category
F WHITE GSFC/R GOLDBERG 11-Astronomy

NCC 1-48 University of Denver 3129
COLLABORATIVE STUDY OF HIGH RESOLUTION INFRARED
ATMOSPHERIC SPECTRA
Period Obligations
11/26/1980-11/30/1995 FY94: \$92,795 TOTAL: \$550,705
Prin. Invest. NASA Tech. Officer CASE Category
A GOLDMAN LARC/C P RINSLAND 31-Atmos Sci
D G MURCRAY LARC/R K SEALS

NCC 2-776 University of Denver 3130
DETECTION AND ANALYSIS OF AIRCRAFT-PRODUCED PARTICLES
DURING THE STRATOSPHERIC, PHOTOCHEMISTRY.....
Period Obligations
11/20/1992-08/31/1993 FY94: \$0 TOTAL: \$144,351
Prin. Invest. NASA Tech. Officer CASE Category
J C WILSON ARC/E P CONDON 31-Atmos Sci
ARC/O B TOON

NCC 2-782 University of Denver 3131
AEROSOL MEASUREMENTS FROM THE ER-2 IN SPADE II AND A
SHOME: UPGRADE OF THE FOCUSED CAVITY AEROSOL ...
Period Obligations
02/18/1993-12/31/1994 FY94: \$373,000 TOTAL: \$414,000
Prin. Invest. NASA Tech. Officer CASE Category
J C WILSON ARC/E CONDON 31-Atmos Sci

NGT 00-051-290 University of Denver 3132
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/30/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R E STENCEL HQ/D HOLLAND 11-Astronomy

NSG-1432 University of Denver 3133
GROUND MONITORING OF ATMOSPHERIC CONSTITUENTS BY HIGH
RESOLUTION INFRARED SOLAR SPECTROSCOPY
Period Obligations
07/08/1977-04/10/1995 FY94: \$60,000 TOTAL: \$1,175,705
Prin. Invest. NASA Tech. Officer CASE Category
D G MURCRAY LARC/C P RINSLAND 39-Env Sci, NEC
LARC/M A SMITH

NAG 8-227 University of Northern Colorado 3134
JOVE
Period Obligations
02/25/1992-06/01/1995 FY94: \$500 TOTAL: \$101,000
Prin. Invest. NASA Tech. Officer CASE Category
C JACKSON MSFC/F SIX 54-Env Biology
S FRYE
R WALCH

NAG 5-1457 University of Southern Colorado 3135
ROSAT ALL-SKY SURVEY: BE TYPE STARS
Period Obligations
08/27/1990-09/30/1992 FY94: TOTAL: \$9,994
Prin. Invest. NASA Tech. Officer CASE Category
T P SNOW GSFC/R PETRE 11-Astronomy

NCC 2-373 University of Southern Colorado 3136
INVESTIGATION OF ADVANCED FAILURE MODES ANALYSES TESTS
FOR HARRIER DIGITAL AVIONICS
Period Obligations
10/01/1987-09/30/1994 FY94: \$240,091 TOTAL: \$2,228,636
Prin. Invest. NASA Tech. Officer CASE Category
W R DUNN ARC/V B HOLLAND 49-Engr, NEC
M LEE ARC/R YEE

NCC 2-609 University of Southern Colorado 3137
INVESTIGATION OF ADVANCED SYSTEM ASSURANCE TECHNOLOGIES
Period Obligations
05/22/1989-09/30/1994 FY94: \$244,758 TOTAL: \$803,693
Prin. Invest. NASA Tech. Officer CASE Category
W R DUNN ARC/L W DOTY 49-Engr, NEC
ARC/C N BURROUS

CONNECTICUT

NAGW 3332 Univ. of Connecticut Health Center 3138
COLLAGEN PROMOTER TRANSGENE ACTIVITY IN NORMAL AND
MUTANT MICE
Period Obligations
02/05/1993-01/31/1995 FY94: \$60,000 TOTAL: \$120,000
Prin. Invest. NASA Tech. Officer CASE Category
D W ROWE HQ/T W HALSTEAD 51-Biological Sci

**NASA'S UNIVERSITY PROGRAM
CONNECTICUT (Continued)**

NAG 1-1382 University of Connecticut 3139
NEAR-THRESHOLD FATIGUE CRACK GROWTH IN ALUMINUM AL
LOYS AND Ti-6AL-4V FOR AMBIENT TO 400 DEGREES F
Period *Obligations*
02/28/1992-02/25/1995 FY94: \$55,064 TOTAL: \$153,918
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A J MCEVILY LARC/J C NEWMAN 47-Materials Engr
LARC/C E HARRIS

NAG 3-1258 University of Connecticut 3140
HEAT CONDUCTION PROPERTIES OF COMPOSITES WITH A PE
RIODIC MICROSTRUCTURE
Period *Obligations*
03/13/1991-08/31/1994 FY94: \$0 TOTAL: \$158,042
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E H JORDAN LERC/A D FREED 46-Mech Engr
K P WALKER LERC/M A MCGAW

NAG 3-1348 University of Connecticut 3141
A STUDY OF UNSTEADY VISCOUS COMPRESSIBLE FLOWS IN
TURBOMACHINERY USING A MULTI-DOMAIN PSEUDOSPECTRAL
Period *Obligations*
05/19/1992-05/31/1994 FY94: \$0 TOTAL: \$61,307
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P HANLEY LERC/L REID 41-Aero Engr

NAG 5-2248 University of Connecticut 3142
TUNABLE LASER SOURCE FOR IR SPECTROSCOPY
Period *Obligations*
04/30/1993-02/28/1995 FY94: \$0 TOTAL: \$45,112
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K CHEO GSFC/T KOSTIUK 45-Elec Engr

NAGW 2088 University of Connecticut 3143
CALIBRATION AND TESTING OF POPULATION DYNAMICS MOD ELS
AT MULTIPLE SPATIAL SCALES USING REMOTE SENS.
Period *Obligations*
05/14/1990-10/31/1993 FY94: \$0 TOTAL: \$314,779
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S PACALS HQ/M M AVERNER 54-Env Biology

NAS 3-26619 University of Connecticut 3144
X-RAY BASED EXTENSOMETRY
Period *Obligations*
07/13/1992-02/17/1995 FY94: \$77,973 TOTAL: \$161,821
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E JORDAN LERC/J P BARRENGER 47-Materials Engr

NCC 5-64 University of Connecticut 3145
CONNECT: A NEW ENGLAND ALLIANCE FOR PHOTONICS TECH
NOLOGY DEPLOYMENT PROJECT IN SUPPORT OF TRP PRGRM
Period *Obligations*
08/02/1994-08/02/1995 FY94: \$369,000 TOTAL: \$369,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C ROYCHOUDHURI GSFC/N MINNIFIELD 49-Engr, NEC

NGT 00-030-240 University of Connecticut 3146
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/14/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J SILANDER HQ/A C JANETOS 39-Env Sci, NEC

NGT 00-070-214 University of Connecticut 3147
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/04/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S SUNG HQ/F C OWENS 43-Chem Engr

NAG 8-274 University of Hartford 3148
JOVE
Period *Obligations*
12/10/1992-05/31/1995 FY94: \$20,000 TOTAL: \$67,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L NAGURNEY MSFC/F SIX 99-Multi-Discip

NGT 00-040-037 University of Hartford 3149
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRA M
Period *Obligations*
08/15/1991-02/28/1995 FY94: \$170,500 TOTAL: \$663,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L PIERCE HQ/E T SCHWARTZ 99-Multi-Discip

NAGW 3632 Wesleyan University 3150
PHOTOMETRIC STUDIES OF T TAURI STARS
Period *Obligations*
05/28/1993-05/31/1994 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W HERBST HQ/J A NUTH 19-Phys Sci, NEC

NAG 3-884 Yale University 3151
THEORY OF CHEM VAPOR DEP PROCESSES FOR ADV CERAMIC
COATINGS
Period *Obligations*
03/23/1988-11/01/1992 FY94: \$0 TOTAL: \$190,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D ROSNER LARC/C A STEARNS 19-Phys Sci, NEC

NAG 3-996 Yale University 3152
FUEL-RICH CATALYTICALLY STABILIZED COMBUSTION
Period *Obligations*
02/07/1989-03/01/1995 FY94: \$93,332 TOTAL: \$562,198
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L D PFETTERLE LERC/C M LEE 99-Multi-Discip
C HORVATH
A OLIVER

NAG 3-1195 Yale University 3153
REDUCED MECHANISMS IN PREMIXED AND NONPREMIXED HYDRO
GEN AND METHANE-AIR FLAMES
Period *Obligations*
07/18/1990-03/07/1994 FY94: TOTAL: \$260,026
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M D SMOOKE LERC/M J RABINOWITZ 12-Chemistry
LERC/E A LEZBERG

NAG 3-1259 Yale University 3154
COMBUSTION OF ELECTROSTATIC SPRAYS OF LIQUID FUELS IN
LAMINAR AND TURBULENT REGIMES
Period *Obligations*
03/13/1991-01/09/1995 FY94: \$100,539 TOTAL: \$371,033
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A GOMEZ LERC/D P STOCKER 46-Mech Engr
M B LONG
M D SMOOKE

**NASA'S UNIVERSITY PROGRAM
CONNECTICUT (Continued)**

NAG 3-1625 Yale University 3155
NUMERICAL MODELING OF FLAME-BALLS IN FUEL-AIR MIXTURES
Period *Obligations*
06/22/1994-06/21/1995 FY94: \$29,000 TOTAL: \$29,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M D SMOOKE LERC/H D ROSS 46-Mech Engr

NAG 3-1654 Yale University 3156
FLUID CREEP EFFECTS ON NEAR WALL SOLUTE TRANSPORT FOR
NON ISOTHERMAL AMPOULES AND SUSPENDED PARTICLE
Period *Obligations*
07/19/1994-07/18/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E ROSNER LERC/J S LING 13-Physics

NAG 5-1244 Yale University 3157
SUPERCONDUCTING FILMS SINGLE PHOTON X-RAY DETECTORS
Period *Obligations*
07/28/1989-11/14/1994 FY94: \$92,000 TOTAL: \$418,080
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E PROBER GSFC/S H MOSELEY 13-Physics

NAG 5-1486 Yale University 3158
GLOBAL MODELING OF YEARS-TO-CENTURIES TIMESCALE
Period *Obligations*
11/26/1990-04/30/1994 FY94: \$0 TOTAL: \$675,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P DEMARQUE GSFC/T J BIRMINGHAM 13-Physics

NAG 5-1619 Yale University 3159
HRI OBSERVATIONS OF NEARBY GLOBULAR CLUSTERS: II NGC
6656
Period *Obligations*
10/15/1991-04/14/1994 FY94: \$0 TOTAL: \$33,956
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C D BAILYN GSFC/R PETRE 11-Astronomy

NAG 5-2316 Yale University 3160
NONLINEAR DYNAMICS OF GLOBAL ATMOSPHERIC AND EARTH
SYSTEM PROCESSES
Period *Obligations*
07/12/1993-01/14/1995 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B SALTZMAN GSFC/O W THIELE 31-Atmos Sci

NAG 8-947 Yale University 3161
FOAM METALLIC GLASS
Period *Obligations*
01/19/1993-01/13/1995 FY94: \$120,000 TOTAL: \$240,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E APFEL MSFC/D REISS 47-Materials Engr

NAGW 2469 Yale University 3162
WHEN STARS COLLIDE; COMPACT OBJECTS IN GLOBULAR CL
USTERS
Period *Obligations*
05/01/1991-12/31/1994 FY94: \$93,132 TOTAL: \$374,429
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C BAILYN HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2531 Yale University 3163
NAGW-2531/YALE UNIV/THEORETICAL STUDIES OF THE
SOLAR-STELLAR CONNECTION WITH THE AID OF SPACE
Period *Obligations*
06/03/1991-02/28/1995 FY94: \$60,750 TOTAL: \$574,165
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P DEMARQUE HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 3563 Yale University 3164
INTERPRETATION OF ULTRAVIOLET AND VISIBLE OBSERVATIONS
OF METAL RICH GALAXIES
Period *Obligations*
04/29/1993-12/31/1994 FY94: \$60,000 TOTAL: \$120,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A OEMLER HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3879 Yale University 3165
YALE UNIV; TERAHERTZ SUPERCONDUCTOR - HOT ELECTRON
RECEIVERS; 12/1/93 NEW AWARD
Period *Obligations*
02/16/1994-11/30/1994 FY94: \$75,000 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E PROBER HQ/L J CAROFF 11-Astronomy
HQ/J M VRTILEK

NCC 2-726 Yale University 3166
CULTIVATION OF TOMATO TISSUES CAPABLE OF FORMING
FLOWERS AND MATURE FRUITS IN VITRO
Period *Obligations*
06/28/1991-10/31/1994 FY94: \$45,600 TOTAL: \$309,896
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A W GALSTON ARC/R D MACELROY 51-Biological Sci

NGT 00-030-010 Yale University 3167
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/23/1990-12/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E P SALATHE HQ/G ASRAR 31-Atmos Sci

NGT 00-030-118 Yale University 3168
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/30/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C G WRAY HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-143 Yale University 3169
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M F COCHRAN HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-050-586 Yale University 3170
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/24/1990-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E PROBER HQ/F C OWENS 13-Physics

**NASA'S UNIVERSITY PROGRAM
CONNECTICUT (Continued)**

NGT 00-050-651 Yale University 3171
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/12/1990-08/31/1994 FY94: \$0 TOTAL: \$65,920
Prin. Invest. NASA Tech. Officer CASE Category
S SOFIA HQ/F C OWENS 11-Astronomy

NGT 00-050-719 Yale University 3172
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/26/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
D GELERNTER HQ/F C OWENS 22-Computer Science

NGT 00-050-832 Yale University 3173
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/25/1991-06/30/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
L J GUIDO HQ/F C OWENS 13-Physics

NGT 00-050-858 Yale University 3174
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/26/1991-06/30/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D GELERNTER HQ/F C OWENS 22-Computer Science

NGT 00-050-859 Yale University 3175
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
D GELERNTER HQ/F C OWENS 22-Computer Science

NGT 00-050-972 Yale University 3176
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/26/1992-08/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
S EISENSTAT HQ/P HUNTER 22-Computer Science

NGT 00-051-037 Yale University 3177
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/05/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D PROBER JPL/C HIX 13-Physics

NGT 00-051-209 Yale University 3178
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D E PROBER GSFC/G SOFFEN 13-Physics

NGT 00-090-113 Yale University 3179
GRSP/UMF
Period Obligations
09/16/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. NASA Tech. Officer CASE Category
R WEBER HQ/D K RUSSELL 99-Multi-Discip

DELAWARE

NAG 8-248 Delaware State College 3180
JOVE
Period Obligations
08/10/1992-08/09/1995 FY94: \$18,553 TOTAL: \$69,961
Prin. Invest. NASA Tech. Officer CASE Category
P DIMARIC MSFC/C R CHAPPELL 11-Astronomy

NAG 1-1383 University of Delaware 3181
TESTING AND CHARACTERIZATION OF THROUGH-THE-THICK NESS
PROPERTIES OF MULTI-DIRECTIONALLY REINFORCED
Period Obligations
02/20/1992-02/12/1995 FY94: \$65,000 TOTAL: \$173,000
Prin. Invest. NASA Tech. Officer CASE Category
T CHOU LARC/W C JACKSON 47-Materials Engr
A PARVIZI-MAJIDI LARC/C E HARRIS

NAG 2-638 University of Delaware 3182
PERFORMANCE AND POLICY DIMENSIONS IN INTERNET ROUTING
Period Obligations
05/22/1990-01/31/1994 FY94: \$0 TOTAL: \$848,689
Prin. Invest. NASA Tech. Officer CASE Category
D L MILLS ARC/H LUM 45-Elec Engr
G C BONCELET ARC/D MCKELLAR

NAG 3-1424 University of Delaware 3183
SURFACTANT-BASED CRITICAL PHENOMENA IN MICROGRAVITY
Period Obligations
01/11/1993-12/31/1994 FY94: \$100,000 TOTAL: \$200,000
Prin. Invest. NASA Tech. Officer CASE Category
E W KALER LERC/R A WILKINSON 13-Physics
M E PAULAITIS

NAG 5-1654 University of Delaware 3184
(1) CHEMICAL EVOLUTION OF HOT WHITE DWARF STARS; (2)
VARIABLE WHITE DWARF X-RAY SOURCES
Period Obligations
06/24/1991-08/31/1993 FY94: \$0 TOTAL: \$53,695
Prin. Invest. NASA Tech. Officer CASE Category
H SHIPMAN GSFC/R PETRO 11-Astronomy

NAG 5-2365 University of Delaware 3185
THE HOT WHITE DWARF STAR CD 394
Period Obligations
09/09/1993-09/14/1995 FY94: \$21,454 TOTAL: \$21,454
Prin. Invest. NASA Tech. Officer CASE Category
H L SHIPMAN GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2512 University of Delaware 3186
THE HIGHEST QUALITY ULTRAVIOLET SPECTRUM OF 40 ERIB
Period Obligations
02/16/1994-02/28/1995 FY94: \$2,500 TOTAL: \$2,500
Prin. Invest. NASA Tech. Officer CASE Category
H L SHIPMAN GSFC/D WEST 11-Astronomy

NAG 5-2598 University of Delaware 3187
WHITE DWARF STARS
Period Obligations
05/18/1994-05/13/1995 FY94: \$6,000 TOTAL: \$6,000
Prin. Invest. NASA Tech. Officer CASE Category
H L SHIPMAN GSFC/R OLIVERSEN 11-Astronomy

NASA'S UNIVERSITY PROGRAM
DELAWARE (Continued)

NAG 8-1038	University of Delaware	3188
FORMATION OF ORDERED ARRAYS OF PROTEINS ON SURFACE		
<i>Period</i>	<i>Obligations</i>	
03/25/1994-03/24/1995	FY94: \$96,614	TOTAL: \$96,614
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A LENHOFF	MSFC/R SNYDER	51-Biological Sci
NAGW 1040	University of Delaware	3189
ISOTOPIC COMPOSITION OF COSMIC RAY HELIUM FROM 0.3 TO 1.8		
<i>Period</i>	<i>Obligations</i>	
02/15/1989-02/14/1996	FY94: \$200,000	TOTAL: \$1,439,574
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P EVENSON	HQ/W V JONES	13-Physics
NAGW 1644	University of Delaware	3190
THEORETICAL STUDIES IN COSMIC PHYSICS		
<i>Period</i>	<i>Obligations</i>	
03/02/1989-02/28/1995	FY94: \$60,000	TOTAL: \$360,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T K GAISSER	HQ/M M MELLOTT	13-Physics
	HQ/W V JONES	
NAGW 1674	University of Delaware	3191
COORDINATION OF COMPUTER NETWORKING		
<i>Period</i>	<i>Obligations</i>	
03/13/1989-06/30/1994	FY94: \$0	TOTAL: \$342,365
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F WEBSTER	HQ/G S LAGERLOEF	33-Oceanography
	HQ/W S WILSON	
NAGW 1884	University of Delaware	3192
THE USE OF MULTI-CHANNEL MICROWAVE REMOTE SENSING IN		
<i>Period</i>	<i>Obligations</i>	
10/27/1989-02/31/1992	FY94: \$0	TOTAL: \$129,804
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C J WILLMOTT	HQ/D E WICKLAND	39-Env Sci, NEC
	HQ/R E MURPHY	
NAGW 2624	University of Delaware	3193
NAGW-2624/UNIV. DELEWARE/ANALYSIS AND DYNAMICCAL MOD		
ELLING OF UV LINE PROFILE VARIABILITY IN HOT STAR		
<i>Period</i>	<i>Obligations</i>	
08/02/1991-04/30/1995	FY94: \$75,000	TOTAL: \$275,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S P CWOCKI	HQ/G S KUTTER	11-Astronomy
	HQ/G R RIEGLER	
NAGW 2798	University of Delaware	3194
FORMATION OF ORDERED ARRAYS OF PROTEINS ON SURFACE S		
<i>Period</i>	<i>Obligations</i>	
01/03/1992-12/31/1994	FY94: \$0	TOTAL: \$205,692
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A M LENHOFF	HQ/J K ALEXANDER	51-Biological Sci
	HQ/D A HOLLAND	
NAGW 2953	University of Delaware	3195
RESPONSE OF X-BAND NORMALIZED RADAR CROSS SECTION TO		
SEA SURFACE TEMPERATURE AND WAVE NUMBER SPECTRA		
<i>Period</i>	<i>Obligations</i>	
03/06/1992-12/31/1994	FY94: \$0	TOTAL: \$117,529
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
X H YAN	HQ/J S THEON	33-Oceanography
NAGW 2981	University of Delaware	3196
EFFECTS OF RAIN ON SCATTEROMETER WIND MEASUREMENTS		
<i>Period</i>	<i>Obligations</i>	
03/10/1992-12/31/1994	FY94: \$0	TOTAL: \$153,752
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J WU	HQ/J S THEON	31-Atmos Sci
NAS 3-25791	University of Delaware	3197
MODELING AND CHARACTERIZATION OF MULTI-DIMENSIONAL LY		
<i>Period</i>	<i>Obligations</i>	
09/26/1989-05/16/1994	FY94: \$0	TOTAL: \$269,816
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T W CHOU	LERC/J P GYKENYESI	41-Aero Engr
A P MAJIDI		
NGT 00-010-022	University of Delaware	3198
NGT 10022/B UNIV DELAWARE: MULTIDISC. DESIGN AND A NAL.		
FELL. PROG.		
<i>Period</i>	<i>Obligations</i>	
12/07/1993-03/31/1994	FY94: \$48,349	TOTAL: \$48,349
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D J WILKINS	HQ/G S SEIDEL	41-Aero Engr
	HQ/J R FACEY	
NGT 00-030-098	University of Delaware	3199
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM		
<i>Period</i>	<i>Obligations</i>	
10/21/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J S GREENE	HQ/G ASRAR	99-Multi-Discip
	HQ/J S THEON	
NGT 00-030-126	University of Delaware	3200
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM		
<i>Period</i>	<i>Obligations</i>	
10/21/1992-08/31/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J SONG	HQ/G ASRAR	39-Env Sci, NEC
	HQ/D M BUTLER	
NGT 00-040-023	University of Delaware	3201
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRA M		
<i>Period</i>	<i>Obligations</i>	
04/03/1991-02/28/1995	FY94: \$205,000	TOTAL: \$768,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N F NESS	HQ/E T SCHWARTZ	99-Multi-Discip
NGT 00-050-806	University of Delaware	3202
NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
08/12/1991-08/31/1993	FY94: \$0	TOTAL: \$44,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S P OWOCKI	HQ/J ALEXANDER	11-Astronomy
NGT 00-050-871	University of Delaware	3203
NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
08/18/1992-08/31/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D L SPARKS	JSC/S GOLDSTEIN	55-Agriculture Sci

NASA'S UNIVERSITY PROGRAM **DELAWARE (Continued)**

NGT 00-050-889 University of Delaware 3204
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/15/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
K HUNSPERGER JPL/H ASHKERAS 45-Elec Engr

NGT 00-051-347 University of Delaware 3205
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/28/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
E W KALER HQ/G A LESANE 43-Chem Engr

DISTRICT OF COLUMBIA

NGT 00-090-013 Gallaudet College 3206
A MODEL SUMMER PROGRAM FOR HANDICAPPED COLLEGE STUDENTS
Period Obligations
06/08/1988-12/31/1994 FY94: \$66,857 TOTAL: \$370,896
Prin. Invest. NASA Tech. Officer CASE Category
NISSEN HQ/M MARGOLIS 49-Engr, NEC

NGT 00-090-057 Gallaudet College 3207
UNDERGRADUATE STUDENT RESEARCHERS PRG
Period Obligations
11/26/1991-08/31/1994 FY94: \$0 TOTAL: \$109,152
Prin. Invest. NASA Tech. Officer CASE Category
G MCGAUGHRAN HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-074 Gallaudet College 3208
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/26/1992-08/14/1993 FY94: \$0 TOTAL: \$4,793
Prin. Invest. NASA Tech. Officer CASE Category
A NISSEN HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-075 Gallaudet College 3209
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/12/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. NASA Tech. Officer CASE Category
G MCGAUGHRAN HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-182 Gallaudet College 3210
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
G MCGAUGHRAN HQ/D K RUSSELL 99-Multi-Discip

NAG 1-1353 George Washington University 3211
RESEARCH AND EDUCATION PROGRAM FOR NON-TRADITIONAL ENGINEERING STUDENTS IN THE JIAPS
Period Obligations
10/09/1991-04/06/1994 FY94: \$0 TOTAL: \$265,226
Prin. Invest. NASA Tech. Officer CASE Category
J L WHITESIDES LARC/R L YANG 49-Engr, NEC
LARC/E J PRIOR

NAG 1-1386 George Washington University 3212
DEVELOPMENT AND APPLICATION OF PARALLEL ALGORITHMS FOR CFD USING UNSTRUCTURED GRIDS
Period Obligations
02/13/1992-05/31/1994 FY94: \$29,656 TOTAL: \$99,975
Prin. Invest. NASA Tech. Officer CASE Category
R LOHNER LARC/M D SALAS 29-Math/Computer, NEC
LARC/T A ZANG

NAG 1-1416 George Washington University 3213
EVALUATION OF MODAL IDENTIFICATION METHODS FOR THE SPACE STATION FREEDOM MODAL IDENTIFICATION EXP.
Period Obligations
03/17/1992-08/31/1993 FY94: \$1 TOTAL: \$75,824
Prin. Invest. NASA Tech. Officer CASE Category
R H TOLSON LARC/R G KVATERNIK 46-Mech Engr

NAG 3-860 George Washington University 3214
ROTATING EJECTORS
Period Obligations
02/08/1988-12/14/1993 FY94: TOTAL: \$257,499
Prin. Invest. NASA Tech. Officer CASE Category
C A GARRIS LERC/C K DRUMMOND 41-Aero Engr
J V FOA LERC/R LUIDENS

NAG 5-697 George Washington University 3215
MATHEMATICAL MODELING OF ENERGY MINIMIZING OFF- DESIGN SHAPES OF LARGE SCIENTIFIC BALLOONS
Period Obligations
01/25/1993-02/28/1995 FY94: \$82,809 TOTAL: \$157,917
Prin. Invest. NASA Tech. Officer CASE Category
F BAGINSKI GSFC/H C NEEDLEMAN 41-Aero Engr
GSFC/I S SMITH

NAG 5-1807 George Washington University 3216
CORRELATION EFFECTS IN VEGETATION MODELING FOR DET ERM. OF HYDRAULIC PARAMTRS. IN UNDERLYING SOILS
Period Obligations
09/19/1991-09/30/1994 FY94: \$21,999 TOTAL: \$65,997
Prin. Invest. NASA Tech. Officer CASE Category
N M KHADR GSFC/J A WEINMAN 39-Env Sci, NEC
R H LANG GSFC/A J BUSALACCHI

NAG 5-2325 George Washington University 3217
SYNERGISTIC USE OF ACTIVE AND PASSIVE MICROWAVE REMOTE SENSING FOR RETRIEVING SOIL MOISTURE
Period Obligations
07/16/1993-10/31/1994 FY94: \$80,150 TOTAL: \$102,698
Prin. Invest. NASA Tech. Officer CASE Category
N CHAUHAN GSFC/P O'NEILL 54-Env Biology
GSFC/E ENGMAN

NAG 8-788 George Washington University 3218
DEVELOPING AN EARTH SCIENCE DATA POLICY
Period Obligations
08/10/1989-12/31/1994 FY94: \$25,000 TOTAL: \$257,107
Prin. Invest. NASA Tech. Officer CASE Category
J M LOGSDON MSFC/J B STEPHENS 19-Phys Sci, NEC
L R SHAFFER MSFC/G S WILSON

NAGW 2071 George Washington University 3219
DISCRETE RANDOM MODELING OF VEGETATION
Period Obligations
05/02/1990-02/28/1995 FY94: \$120,000 TOTAL: \$520,000
Prin. Invest. NASA Tech. Officer CASE Category
R H LANG HQ/G ASRAR 19-Phys Sci, NEC
HQ/T J PIEPER

**NASA'S UNIVERSITY PROGRAM
DISTRICT OF COLUMBIA (Continued)**

NAGW 2498 George Washington University 3220
HUMANS IN SPACE: EMERGING POLICY ISSUES
Period *Obligations*
05/10/1991-06/30/1995 FY94: \$0 TOTAL: \$300,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LOGSDON HQ/F SULZMAN 59-Life Sci, NEC

NAGW 4050 George Washington University 3221
STATE OF EARTH SCIENCE FROM SPACE
Period *Obligations*
06/15/1994-05/31/1995 FY94: \$72,352 TOTAL: \$72,352
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M LOGSDON HQ/P W BACKLUND 39-Env Sci, NEC
HQ/L K SMITH

NAS 1-19699 George Washington University 3222
AERONAUTICAL, ASTRONAUTICAL, MATERIALS SCIENCE,
COMPUTER SCIENCE AND RELATED DISCIPLINE SUPPORT
Period *Obligations*
08/07/1992-08/07/1997 FY94: \$193,276 TOTAL: \$282,905
Prin. Invest. *NASA Tech. Officer* *CASE Category*
LARC/R L YANG 41-Aero Engr
LARC/E J PRIOR

NASW 4324 George Washington University 3223
EDITORIAL SUPPORT FOR LIFE SCIENCES DIVISION
Period *Obligations*
07/01/1988-12/31/1993 FY94: \$99,144 TOTAL: \$2,224,404
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F R DUTCHER HQ/M SHEPANEK 59-Life Sci, NEC

NCC 1-14 George Washington University 3224
AEROACOUSTICS RESEARCH PROGRAM IN JIAFS
Period *Obligations*
05/16/1979-10/31/1994 FY94: \$257,645 TOTAL: \$2,422,141
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H LIEBOWITZ LARC/L R CLARK 41-Aero Engr
M K MYERS LARC/D G STEPHENS

NCC 1-24 George Washington University 3225
PROGRAMS OF RESEARCH IN FLIGHT SCIENCES
Period *Obligations*
08/08/1979-01/31/1995 FY94: \$278,611 TOTAL: \$2,642,813
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H LIEBOWITZ LARC/R T BRIGHT 41-Aero Engr
J L WHITESIDES

NCC 1-29 George Washington University 3226
RESEARCH PROGRAM IN FLIGHT DYNAMICS IN THE JIAPS AT THE
NASA LANGLEY RESEARCH CENTER
Period *Obligations*
11/16/1979-11/30/1994 FY94: \$215,376 TOTAL: \$2,094,211
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H LIEBOWITZ LARC/P C MURPHY 41-Aero Engr
LARC

NCC 1-47 George Washington University 3227
CORE PROGRAM IN THE JOINT INSTITUTE FOR ADVANCEMENT
OF FLIGHT SCIENCES AT THE NASA-LANGLEY RESEARCH
Period *Obligations*
11/05/1980-10/31/1994 FY94: \$350,921 TOTAL: \$4,271,112
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L WHITESIDES LARC/R L YANG 41-Aero Engr
H W LIEBOWITZ LARC/M F CARD

NCC 1-104 George Washington University 3228
A PROGRAM OF RESEARCH AND EDUCATION IN ASTRONAUTICS
IN JIAFS
Period *Obligations*
04/30/1986-01/31/1995 FY94: \$118,226 TOTAL: \$1,380,474
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H TOLSON LARC/L F ROWELL 42-Astro Engr

NCC 5-51 George Washington University 3229
PROGRAM FOR RESEARCH AND EDUCATION IN SPACE TECHNO
LOGY
Period *Obligations*
12/14/1992-12/14/1994 FY94: \$999,494 TOTAL: \$1,712,452
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G FRIEDER GSFC/T E HUBER 42-Astro Engr
N BEDEWI GSFC/J R ROBINSON

NCC 5-53 George Washington University 3230
DISTRIBUTION AND STRUCTURE OF BIOMASS IN BOREAL FO REST
ECOSYSTEMS
Period *Obligations*
06/17/1993-06/30/1995 FY94: \$30,000 TOTAL: \$51,351
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R LANG GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NSG-5109 George Washington University 3231
DECODING AND PERFORMANCE EVALUATION OF ERROR CODING
CODES
Period *Obligations*
07/16/1976-03/31/1995 FY94: \$63,000 TOTAL: \$1,026,734
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H J HELGERT GSFC/W POLAND JR 49-Engr, NEC
GSFC/W H MILLER

NAGW 3202 Georgetown University 3232
NAGW-3202/GEORGETOWN UNIV/SCIENCE, TECHNOLOGY, AND
INTERNATIONAL AFFAIRS PROGRAM
Period *Obligations*
09/12/1992-07/31/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A SCRIBNER HQ/S G TILFORD 99-Multi-Discip
HQ/P BACKLUND

NAG 2-585 Howard University 3233
PROJECT TO RECONSTRUCT HALOCENE ENVIRONMENTS ON A
KARSTIC PLAIN
Period *Obligations*
07/10/1989-02/28/1993 FY94: \$0 TOTAL: \$289,498
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B H DAHLIN ARC/P A MATSON 54-Env Biology
ARC/C E DULLER

NAG 3-1406 Howard University 3234
DEVELOPMENT OF CUBIC SILICON CARBIDE
Period *Obligations*
12/22/1992-06/12/1995 FY94: \$193,207 TOTAL: \$393,207
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L HARRIS LERC/J A POWELL 45-Elec Engr

NAG 3-1426 Howard University 3235
DEVELOPMENT OF AN ENERGY AND EXPERT SYSTEMS INSTITUT
E
Period *Obligations*
03/26/1993-07/11/1995 FY94: \$399,600 TOTAL: \$787,476
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A MOMOH LERC/J F SELLERS 45-Elec Engr

**NASA'S UNIVERSITY PROGRAM
DISTRICT OF COLUMBIA (Continued)**

NAG 3-1445 Howard University 3236
HOWARD UNIVERSITY/NASA LEWIS COOPERATIVE RESEARCH STUDIES
Period Obligations
03/25/1993-03/31/1996 FY94: \$247,308 TOTAL: \$483,612
Prin. Invest. NASA Tech. Officer CASE Category
R REISS LERC/D F NOGA 46-Mech Engr

NAG 3-1661 Howard University 3237
DEVELOPMENT AND IMPLEMENTATION OF AN ADAPTIVE REAL-TIME CONTROLLER FOR PERMANENT MAGNET BRUSHLESS
Period Obligations
08/08/1994-12/07/1994 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
A RABAAL LERC/D F NOGA 45-Elec Engr

NAG 5-995 Howard University 3238
A DYNAMIC SYSTEMS ENGINEERING METHODOLOGY RESEARCH STUDY
Period Obligations
04/15/1988-01/31/1994 FY94: \$0 TOTAL: \$1,173,773
Prin. Invest. NASA Tech. Officer CASE Category
T L GILL GSFC/A GOODSON 49-Engr, NEC
G F KEYSER
A S PAUL

NAG 5-1017 Howard University 3239
SUPERCONDUCTING MATERIALS FOR SPACE APPLICATIONS
Period Obligations
10/15/1987-12/14/1993 FY94: \$0 TOTAL: \$1,446,000
Prin. Invest. NASA Tech. Officer CASE Category
A N THORPE GSFC/S R BREON 31-Atmos Sci
H HOJAJI GSFC/M D JHABVALA
A BARKATT

NAG 5-1049 Howard University 3240
RESEARCH RELATIVE TO OPTICALLY CONTROLLED MILLIMETER WAVE DEVICES
Period Obligations
05/15/1988-07/31/1994 FY94: \$0 TOTAL: \$510,961
Prin. Invest. NASA Tech. Officer CASE Category
R CHOWDHARY GSFC/A S BURGESS 45-Elec Engr
Y WANG
C E LEINKRAM

NAG 5-1057 Howard University 3241
GLASS CORROSION IN NATURAL ENVIRONMENTS
Period Obligations
06/15/1988-12/14/1993 FY94: \$0 TOTAL: \$222,000
Prin. Invest. NASA Tech. Officer CASE Category
A N THORPE GSFC/W B SULLIVAN 13-Physics
A BARKATT GSFC/J O'KEEFE

NAGW 785 Howard University 3242
PHOTOCHEMISTRY OF ACETYLENES - LAB STUDIES
Period Obligations
08/01/1985-12/31/1994 FY94: \$61,912 TOTAL: \$514,072
Prin. Invest. NASA Tech. Officer CASE Category
H OKABE HQ/J T BERGSTRALH 31-Atmos Sci
HQ/W L QUAIDE

NAGW 2931 Howard University 3243
MICROBIAL WEATHERING OF SILICATE MINERALS BY THERMOPHILES
Period Obligations
02/27/1992-06/30/1994 FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
D W SCHWARTMAN HQ/J D RUMMEL 54-Env Biology

NAGW 2950 Howard University 3244
CENTER FOR THE STUDY OF TERRESTRIAL AND EXTRATERRESTRIAL ATMOSPHERES
Period Obligations
03/06/1992-12/31/1994 FY94: \$1,613,000 TOTAL: \$4,520,672
Prin. Invest. NASA Tech. Officer CASE Category
A N THORNE HQ/N E MASSENBERG 13-Physics
HQ/S HARTMAN

NCA 5-107 Howard University 3245
PUBLIC SERVICE INTERNSHIP PROGRAM
Period Obligations
06/03/1986-05/31/1995 FY94: \$70,200 TOTAL: \$402,531
Prin. Invest. NASA Tech. Officer CASE Category
M C WOODARD GSFC/D MENCHAN 99-Multi-Discip

NGT 00-010-002 Howard University 3246
TRAINING TEACHERS FOR MIDDLE SCHOOL SCIENCE AND MATHEMATICS EDUCATION
Period Obligations
06/17/1993-06/14/1995 FY94: \$0 TOTAL: \$84,925
Prin. Invest. NASA Tech. Officer CASE Category
M W THOMPSON HQ/D V GALLAWAY 99-Multi-Discip

NGT 00-040-024 Howard University 3247
NGT-40024/HOWARD UNIV/NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
05/29/1991-02/28/1995 FY94: \$170,000 TOTAL: \$707,450
Prin. Invest. NASA Tech. Officer CASE Category
J B HALPERN HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-973 Howard University 3248
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/13/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
J A MOMEH JPL/H ASKHENAS 45-Elec Engr

NGT 9-11060 Howard University 3249
SUMMER FACULTY FELLOWSHIP PROGRAM
Period Obligations
01/01/1978-01/31/1994 FY94: \$0 TOTAL: \$2,281,962
Prin. Invest. NASA Tech. Officer CASE Category
D N FAN HQ/A S MCGEE 99-Multi-Discip
HQ/E T SCHWARTZ

NAG 5-1319 The American University 3250
SOLID STATE YAG RING LASER RESEARCH
Period Obligations
12/12/1989-08/31/1994 FY94: \$5,200 TOTAL: \$188,848
Prin. Invest. NASA Tech. Officer CASE Category
R B KAY GSFC/B D SEERY 49-Engr, NEC

**NASA'S UNIVERSITY PROGRAM
DISTRICT OF COLUMBIA (Continued)**

NASW 4798 The American University 3251
HISTORY OF SPACE AND THE AMERICAN IMAGINATION
Period Obligations
05/25/1993-05/31/1995 FY94: \$28,050 TOTAL: \$59,564
Prin. Invest. NASA Tech. Officer CASE Category
H MC CURDY HQ/R D LAUNIUS 73-History

NCC 5-78 The American University 3252
DEVELOPMENT OF STATE OF THE ART SOLID STATE LASERS FOR
ALTIMETRY
Period Obligations
08/26/1994-11/30/1995 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
R B GSFC/J WOLFGANG 13-Physics
B COYLE GSFC/L K PACINI

NGT 00-050-649 The American University 3253
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/11/1990-10/31/1993 FY94: TOTAL: \$65,988
Prin. Invest. NASA Tech. Officer CASE Category
R B KAY HQ/F C OWENS 13-Physics

NGT 00-051-032 The American University 3254
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/14/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R B KAY GSFC/G SOFFEN 13-Physics

NAG 1-1296 The Catholic University of America 3255
AUTOMATION AND OPERATOR 'COMPLACENCY' IN MONITORING
Period Obligations
06/21/1991-06/30/1995 FY94: \$160,063 TOTAL: \$432,357
Prin. Invest. NASA Tech. Officer CASE Category
R PARASURAMAN LARC/A T POPE 69-Psych, NEC
LARC/J R COMSTOCK

NAG 5-296 The Catholic University of America 3256
THE SHARP-LINED FEATURES IN THE ULTRAVIOLET SPECTRA OF
HOT WHITE DWARFS
Period Obligations
02/15/1983-09/14/1993 FY94: \$0 TOTAL: \$688,793
Prin. Invest. NASA Tech. Officer CASE Category
F C BRUHWEILER GSFC/D K WEST 11-Astronomy
C MONTROSE
F FEKEL

NAG 5-780 The Catholic University of America 3257
ACTIVE CONTROL OF ROBOT MANIPULATOR COMPLIANCE
Period Obligations
05/15/1986-03/14/1994 FY94: \$0 TOTAL: \$443,426
Prin. Invest. NASA Tech. Officer CASE Category
C C NGUYEN GSFC/T PREMACK 45-Elec Engr

NAG 5-1353 The Catholic University of America 3258
LABORATORY AND IUE SPECTROSCOPY: EXPANDING
DATABASE
Period Obligations
04/11/1990-05/31/1993 FY94: \$0 TOTAL: \$121,600
Prin. Invest. NASA Tech. Officer CASE Category
F C BRUHWEILER GSFC/D WEST 11-Astronomy

NAG 5-1413 The Catholic University of America 3259
OBSERVATIONS OBTAINED W/ GODDARD HIGH RESOLUTION
Period Obligations
08/02/1990-05/14/1995 FY94: \$51,322 TOTAL: \$220,641
Prin. Invest. NASA Tech. Officer CASE Category
F C BRUHWEILER GSFC/A SMITH 11-Astronomy
C A GRADY

NAG 5-1414 The Catholic University of America 3260
TIME-DEPENDENT MODEL TO CALCULATE TONIC AND
MOLECULAR
Period Obligations
08/02/1990-05/14/1995 FY94: \$35,000 TOTAL: \$134,360
Prin. Invest. NASA Tech. Officer CASE Category
C H LYU GSFC/A M SMITH 11-Astronomy
F C BRUHWEILER

NAG 5-1415 The Catholic University of America 3261
SPACE-RATED CONNECTORS USING ROBOT-END-EFFECTORS
Period Obligations
08/02/1990-09/30/1993 FY94: \$0 TOTAL: \$80,000
Prin. Invest. NASA Tech. Officer CASE Category
C C NGUYEN GSFC/L PURVES 29-Math/Computer, NEC

NAG 5-1580 The Catholic University of America 3262
A SURVEY OF X-RAY EMISSION FROM BE STARS; A ROSAT
INVESTIGATION OF FLARE-LIKE ACTIVITY IN THE B2E...
Period Obligations
05/21/1991-03/31/1994 FY94: \$0 TOTAL: \$16,000
Prin. Invest. NASA Tech. Officer CASE Category
F BRUHWEILER GSFC/R PETRE 11-Astronomy

NAG 5-1783 The Catholic University of America 3263
IUE OBS., OF MASS OUTFLOWS IN BETA PICTORIS AND A-SH ELL
STAR; IUE OBS. OF A AND B STAR CANDIDATE ...
Period Obligations
09/13/1991-09/30/1993 FY94: \$0 TOTAL: \$43,600
Prin. Invest. NASA Tech. Officer CASE Category
F BRUHWEILER GSFC/D WEST 11-Astronomy

NAG 5-2057 The Catholic University of America 3264
SUPPORT AND ANALYSIS FOR THE VOYAGER UVS GUEST OBS
ERVER AND ARCHIVAL PROGRAMS
Period Obligations
08/05/1992-02/14/1995 FY94: \$6,000 TOTAL: \$68,000
Prin. Invest. NASA Tech. Officer CASE Category
F C BRUHWEILER GSFC/R S POLIDAN 11-Astronomy
GSFC/R J OLIVERSON

NAG 5-2126 The Catholic University of America 3265
DELINEATING THE SPECTRAL TYPE BOUNDARY FOR THE ONS ET
OF CHROMOSPHERIC ACTIVITY
Period Obligations
10/28/1992-01/31/1995 FY94: \$38,960 TOTAL: \$63,500
Prin. Invest. NASA Tech. Officer CASE Category
F C BRUHWEILER GSFC/D WEST 12-Chemistry

NAG 5-2284 The Catholic University of America 3266
MORPHOLOGY OF LOCAL H I VOID AND THE IONIZATION OF HELIUM
IN THE LISM AND GALACTIC HALO
Period Obligations
06/11/1993-06/14/1995 FY94: \$82,992 TOTAL: \$122,992
Prin. Invest. NASA Tech. Officer CASE Category
F C BRUHWEILER GSFC/R O LIVERSON 11-Astronomy

NASA'S UNIVERSITY PROGRAM **DISTRICT OF COLUMBIA (Continued)**

NAG 5-2445 The Catholic University of America 3267
 PARTICIPATION IN THE MAGNETOMETER EXPERIMENT ON WIND
Period Obligations
 12/06/1993-12/14/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
 Y C WHANG GSFC/R P LEPPING 13-Physics

NCC 5-68 The Catholic University of America 3268
 STUDIES OF ELEMENTARY REACTIONS OF CHEMICAL IMPORTANCE
 IN THE ATMOSPHERES OF PLANETS
Period Obligations
 04/28/1994-04/30/1995 FY94: \$46,408 TOTAL: \$46,408
Prin. Invest. NASA Tech. Officer CASE Category
 F L NESBITT GSFC/L J STIEF 12-Chemistry

NGT 00-070-043 The Catholic University of America 3269
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 10/20/1987-08/31/1994 FY94: \$0 TOTAL: \$142,000
Prin. Invest. NASA Tech. Officer CASE Category
 F BRUHWELER HQ/F C OWENS 13-Physics

NGT 00-070-371 The Catholic University of America 3270
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 08/30/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 F C BRUHWELER HQ/D K RUSSELL 19-Phys Sci, NEC

NSG-5066 The Catholic University of America 3271
 RESEARCH OF SOLAR HARD X-RAYS AND GAMMA-RAYS
Period Obligations
 05/01/1975-03/31/1994 FY94: \$313,415 TOTAL: \$2,569,585
Prin. Invest. NASA Tech. Officer CASE Category
 C WERNITZ GSFC/L ORWIG 11-Astronomy
 R STARR GSFC/R L SCHMADEBECK

NSG-5173 The Catholic University of America 3272
 ATOM-MOLECULE REACTIONS OF CHEMICAL IMPORTANCE IN THE
 STRATHOSPHERE
Period Obligations
 06/01/1977-04/30/1994 FY94: \$0 TOTAL: \$631,315
Prin. Invest. NASA Tech. Officer CASE Category
 D GUIMAN GSFC/D F NAVA 12-Chemistry
 J V MICHAEL

NAG 5-2345 University of District of Columbia 3273
 A STUDY OF SURFACE TEMPERATURES, CLOUDS AND NET RADIATION
Period Obligations
 07/27/1993-10/14/1994 FY94: \$0 TOTAL: \$56,838
Prin. Invest. NASA Tech. Officer CASE Category
 H L DHURIA GSFC/H L KYLE 31-Atmos Sci

NAG 5-2348 University of District of Columbia 3274
 HIGH TC SUPERCONDUCTING BOLOMETRIC AND NONBOLOMETRIC
 INFRARED (IR) DETECTORS
Period Obligations
 08/09/1993-08/14/1995 FY94: \$111,000 TOTAL: \$222,000
Prin. Invest. NASA Tech. Officer CASE Category
 S LAKEOU GSFC/C ALLEN 45-Elec Engr

NAGW 2045 University of District of Columbia 3275
 SATURDAY ACADEMY-ENGINEERING, MATHEMATICS AND COMPUTER
 SCIENCE FOR ACADEMICALLY TALENTED STUDENTS
Period Obligations
 03/30/1990-03/31/1995 FY94: \$511,331 TOTAL: \$1,916,340
Prin. Invest. NASA Tech. Officer CASE Category
 W R COLEMAN HQ/Y B FREEMAN 29-Math/Computer, NEC

NAGW 2216 University of District of Columbia 3276
 NAGW-2216/UNIV OF DISTRICT COLUMBIA/SCIENTIFIC RENEWAL
Period Obligations
 08/22/1990-07/31/1995 FY94: \$227,977 TOTAL: \$980,681
Prin. Invest. NASA Tech. Officer CASE Category
 W R COLEMAN HQ/M S MARGOLIS 99-Multi-Discip

FLORIDA

NAG 8-991 Bethune - Cookman College 3277
 JOVE
Period Obligations
 04/06/1994-05/31/1995 FY94: \$88,000 TOTAL: \$88,000
Prin. Invest. NASA Tech. Officer CASE Category
 S A RAHMANI MSFC/F SIX 99-Multi-Discip
 L C AGBA
 S K DAVID, N.G.

NAG10-114 Brevard Community College 3278
 INSTRUCTIONAL SYSTEMS DESIGN PROJECT
Period Obligations
 12/01/1992-02/28/1994 FY94: TOTAL: \$33,023
Prin. Invest. NASA Tech. Officer CASE Category
 D L PULKET KSC/B MARTIN 99-Multi-Discip

NAG 5-1843 Eckerd College 3279
 EXPERIMENTAL STUDIES OF FAR-INFRARED SPECTRA OF COSMIC
 TYPE ICES
Period Obligations
 12/16/1991-01/14/1995 FY94: \$5,000 TOTAL: \$8,000
Prin. Invest. NASA Tech. Officer CASE Category
 R L HUDSON GSFC/M H MOORE 11-Astronomy
 GSFC/J A NUTH

NAGW 3992 Edward Waters College 3280
 MATHEMATICS SCIENCE AND TECHNOLOGY
Period Obligations
 05/19/1994-05/14/1995 FY94: \$300,000 TOTAL: \$300,000
Prin. Invest. NASA Tech. Officer CASE Category
 N SUNDURLINGAM HQ/B WHITE 99-Multi-Discip

NAG 1-1593 Embry-Riddle Aeronautical University 3281
 HUMAN FACTORS CERTIFICATION OF ADVANCED AVIATION
 SYSTEMS
Period Obligations
 01/25/1994-01/24/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 J A WISE LARC/T M WALSH 99-Multi-Discip
 D J GARLAND LARC/P C SCHUTTE

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NCC 1-66 Embry-Riddle Aeronautical University 3282
COCKPIT DISPLAY OF TRAFFIC INFORMATION (CDTI)
Period *Obligations*
02/24/1982-09/30/1994 FY94: \$65,897 TOTAL: \$662,188
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G W LOHR LARC/L CREDEUR 41-Aero Engr
LARC/H P BERGERON

NCC 8-26 Embry-Riddle Aeronautical University 3283
JOVE
Period *Obligations*
12/07/1992-05/31/1995 FY94: \$42,561 TOTAL: \$167,374
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L ERICKSON MSFC/F SIX 31-Atmos Sci

NAG 5-2583 Fla International University 3284
SCATTERING OF METASTABLE ATOMS
Period *Obligations*
04/28/1994-08/31/1995 FY94: \$74,143 TOTAL: \$74,143
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J W SHELTON GSFC/J J HILLMAN 13-Physics
K A HARDY

NAG 8-272 Fla International University 3285
JOVE
Period *Obligations*
02/02/1993-05/31/1995 FY94: \$37,000 TOTAL: \$113,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W V VAN HAMME MSFC/F SIX 13-Physics
J R WEBB
J W SHELTON

NAG 8-283 Fla International University 3286
THEORY OF THE MOTION OF METEOR PARTICLES IN SOLID MATERIALS
Period *Obligations*
03/01/1993-03/01/1995 FY94: \$72,676 TOTAL: \$145,352
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N MUNROE MSFC/F SIX 11-Astronomy
G CHERPANOV

NAGW 2092 Fla International University 3287
ALGAL SPECTRAL REFLECTANCE SIGNATURES AND REMOTE SENSING OF HYPERSALINE AQUATIC ENVIRONMENTS
Period *Obligations*
07/30/1990-04/30/1994 FY94: \$0 TOTAL: \$195,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L L RICHARDSON HQ/M M AVERNER 54-Env Biology

NAGW 4080 Fla International University 3288
HIGH PERFORMANCE DATABASE MANAGEMENT
Period *Obligations*
07/13/1994-05/31/1995 FY94: \$400,000 TOTAL: \$400,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N RISHE HQ/B L WHITE 22-Computer Science

NCCW 44 Fla International University 3289
STRATEGIC COMMERCIALIZATION AND UTILIZATION INITIATIVE (SCUI)
Period *Obligations*
05/25/1994-04/30/1995 FY94: \$399,704 TOTAL: \$399,704
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A EBADIAN HQ/A KAHN 99-Multi-Discip
HQ/B WHITE

NGT 00-090-147 Fla International University 3290
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NAVLAKHA HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-148 Fla International University 3291
GSRP/UMF
Period *Obligations*
09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NAVLAKHA HQ/D K RUSSELL 99-Multi-Discip

NAG 1-1372 Florida A&M University 3292
STABILITY OF MIXING LAYERS
Period *Obligations*
01/24/1992-01/23/1993 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C K TAM LARC/M G MACARAEG 41-Aero Engr
A KROTHAPALLI LARC/A KUMAR

NAG 2-921 Florida A&M University 3293
THE EVOLUTION OF CONDENSATES IN SHOCK TUBE FLOW
Period *Obligations*
07/28/1994-04/30/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A JOHNSON III, (DR ARC/O B TOON 31-Atmos Sci

NAG 2-929 Florida A&M University 3294
TURBULENT MEASUREMENTS IN SUPERSONIC FLOW
Period *Obligations*
09/26/1994-08/31/1995 FY94: \$80,000 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A JOHNSON III ARC/D G FLETCHER 41-Aero Engr
ARC/R L MCKENZIE

NAG 3-1494 Florida A&M University 3295
DISTANCE LEARNING IN THE SCIENCES
Period *Obligations*
05/27/1993-08/22/1995 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L EARLY LERC/M S PLECITY 49-Engr, NEC
K F SOLIMAN LERC/R J SCHERTLER

NAG 3-1663 Florida A&M University 3296
BASIC STUDIES ON STOVL AIRCRAFT JET EFFECTS AND HO T GAS INGESTION
Period *Obligations*
09/15/1994-01/14/1995 FY94: \$123,992 TOTAL: \$123,992
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A KROTHAPALLI LERC/A L JOHNS 41-Aero Engr
LERC/T J BIESIADNY

NAGW 2930 Florida A&M University 3297
CENTER FOR NONLINEAR AND NONEQUILIBRIUM AEROSCIENCE
Period *Obligations*
02/19/1992-12/31/1995 FY94: \$2,004,521 TOTAL: \$4,716,081
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A JOHNSON HQ/S E MASSENBERG 99-Multi-Discip
HQ/S HARTMAN

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NGT 00-090-015 Florida A&M University 3298
SUMMER BRIDGE PROGRAM 'THE ENGINEERING CONCEPTS INSTITUTE'
Period *Obligations*
06/17/1988-06/24/1995 FY94: \$51,275 TOTAL: \$319,880
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W TOLIVER HQ/Y B FREEMAN 49-Engr, NEC
KSC/J D DIGGS

NGT 00-090-030 Florida A&M University 3299
PROJECT IMAGE - INCREAS ING MINORITY ACCESS TO GRADUATE ENGINEERING
Period *Obligations*
03/14/1990-11/14/1994 FY94: \$1,124,726 TOTAL: \$3,351,517
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F S HUMPHRIES HQ/L WARREN 49-Engr, NEC
HQ/M MARGOLIS

NGT 00-090-107 Florida A&M University 3300
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/17/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E R TOSSIE HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-181 Florida A&M University 3301
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E R TOSSIE HQ/D K RUSSELL 99-Multi-Discip

NGT10-40900 Florida A&M University 3302
GRADUATE SCHOOL RESEARCHERS PROGRAM
Period *Obligations*
10/01/1985-12/31/1994 FY94: \$489,333 TOTAL: \$3,883,564
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K REDDA HQ/M MARGOLIS 59-Life Sci, NEC
HQ/Y FREEMAN

NAG 1-1202 Florida Atlantic University 3303
BROAD BAND NOISE PREDICTION FOR ADVANCED DUCTED PROP FANS USIN LOCALLY GENERATED INFLOW FDP
Period *Obligations*
12/17/1990-12/31/1994 FY94: \$77,312 TOTAL: \$208,788
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S A GLEGG LARC/J W POSEY 41-Aero Engr
LARC/F FARASSAT

NAG 1-1310 Florida Atlantic University 3304
FUNDAMENTAL PROBLEMS IN PROBABILISTICS AND CONVEX ANALYSES OF UNCERTAIN INITIAL IMPERFECTIONS FDP
Period *Obligations*
07/15/1991-05/31/1995 FY94: \$72,760 TOTAL: \$171,145
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I ELISHAKOFF LARC/J H STARNES 41-Aero Engr

NAG 2-797 Florida Atlantic University 3305
SENSITIVITY OF LAG-DAMPING PREDICTIONS TO STRUCTUR AL MODELING APPROXIMATIONS OF ISOLATED ROTORS IN.
Period *Obligations*
08/17/1992-07/31/1995 FY94: \$15,225 TOTAL: \$79,143
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G H GAONKAR ARC/R A ORMISTON 41-Aero Engr

NAG 3-1198 Florida Atlantic University 3306
A MODEL BASED FAILURE DIAGNOSIS SYSTEM BASED ON RE AL TIME INDENTIFICATION FOR HELICOPTER ENGINES
Period *Obligations*
08/28/1990-12/31/1994 FY94: \$0 TOTAL: \$176,020
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A DUYAR LERC/J S LITT 49-Engr, NEC

NAG 3-1314 Florida Atlantic University 3307
THE SIMULATION OF DISLOCATION GENERATION OF GAAS C RYSTALS DURING BRIDGMAN GROWTH
Period *Obligations*
12/30/1991-12/31/1994 FY94: \$0 TOTAL: \$85,684
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C T TSAI LERC/A CHAIT 47-Materials Engr

NAG 3-1324 Florida Atlantic University 3308
MODELING OF THE SSME USING NEURAL NETWORKS
Period *Obligations*
02/11/1992-09/30/1994 FY94: \$0 TOTAL: \$105,887
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A DUYAR LERC/T H GUO 41-Aero Engr

NAG 3-1435 Florida Atlantic University 3309
ELECTROCHEMICAL SYNTHESIS OF COPPER/REFRACTORY MET AL COATED CARBON FIBER PRECURSOR FOR METAL MAT CO
Period *Obligations*
01/19/1993-02/07/1995 FY94: \$45,980 TOTAL: \$81,888
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M LIPKA LERC/R V MINER 47-Materials Engr

NAGW 989 Florida Atlantic University 3310
GROUND BASE COLUMN ABUNDANCE OF ATOMSP. HYDROXYL
Period *Obligations*
12/01/1986-03/31/1995 FY94: \$35,800 TOTAL: \$217,502
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C R BURNETT HQ/J J MARGITAN 31-Atmos Sci
HQ/R T WATSON

NAGW 2778 Florida Atlantic University 3311
CENTER FOR COMMERCIAL DEVELOPMENT OF SPACE COMMUNI CATIONS
Period *Obligations*
01/23/1992-10/31/1994 FY94: \$900,000 TOTAL: \$2,900,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W GLENN HQ/V CEVENINI 99-Multi-Discip
J SHEPPERD HQ/C PITTMAN

NAG10-83 Florida Atlantic University 3312
DEVELOPMENT OF SELF-SEALING TUB-FITTINGS FOR CRYOGENIC APPLICATIONS
Period *Obligations*
05/28/1991-08/30/1993 FY94: TOTAL: \$153,991
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W L CHOW KSC/M LITTLEFIELD 46-Mech Engr

NAG10-104 Florida Atlantic University 3313
AN INVESTIGATION OF ENVIRONMENT SENSITIVE TRACTURE BEHAVIOR OF STEEL ALLOYS IN SEAWATER
Period *Obligations*
06/01/1992-10/31/1994 FY94: \$0 TOTAL: \$104,306
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M LIPKA KSC/L MACDOWELL 54-Env Biology

NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)

NAG10-108 Florida Atlantic University 3314
 INDUSTRY LINKAGE ENHANCEMENT FOR TECH TRANSFER THRU
 INNOVATIVE COMMUNICATION TECHNIQUES
Period Obligations
 08/03/1992-10/31/1994 FY94: \$0 TOTAL: \$25,000
Prin. Invest NASA Tech. Officer CASE Category
 E SKELLINGS KSC/P ELFREY 99-Multi-Discip

NAS 3-26956 Florida Atlantic University 3315
 ACTS PROPAGATION EXPERIMENTS
Period Obligations
 06/21/1993-10/21/1995 FY94: \$0 TOTAL: \$97,597
Prin. Invest NASA Tech. Officer CASE Category
 H F HELMKEN LERC/R J GUNDERMAN 19-Phys Sci, NEC

NCC10-5 Florida Atlantic University 3316
 RESPONSE OF STRUCTURES AND EQUIP TO ACOUSTIC EXCITA-
 TIONS..W/BONDED UNCERTAIN PARAMETERS
Period Obligations
 05/01/1990-04/30/1994 FY94: \$0 TOTAL: \$298,836
Prin. Invest NASA Tech. Officer CASE Category
 Y K LIN KSC/R CAIMI 99-Multi-Discip
 I ELISHAKOFF

NAG 8-195 Florida Institute of Technology 3317
 PROJECT JOVE
Period Obligations
 05/24/1991-06/20/1995 FY94: \$0 TOTAL: \$95,203
Prin. Invest NASA Tech. Officer CASE Category
 J D PATTERSON MSFC/F SIX 11-Astronomy

NAG 8-941 Florida Institute of Technology 3318
 ELECTRONIC CHARACTERIZATION OF DEFECTS IN NARROW GAP
 SEMICONDUCTORS
Period Obligations
 11/23/1992-11/24/1993 FY94: \$0 TOTAL: \$35,002
Prin. Invest NASA Tech. Officer CASE Category
 J D PATTERSON MSFC/S L LEHOCZKY 13-Physics

NAG 8-1094 Florida Institute of Technology 3319
 MERCURY STUDIES
Period Obligations
 09/19/1994-09/18/1995 FY94: \$32,569 TOTAL: \$32,569
Prin. Invest NASA Tech. Officer CASE Category
 J D PATTERSON MSFC/S D COBB 13-Physics
 MSFC/S L LEHOCZKY

NAG10-98 Florida Institute of Technology 3320
 HYDROGEN LEAK DETECTION TECHNOLOGY
Period Obligations
 02/12/1992-08/31/1994 FY94: \$0 TOTAL: \$108,172
Prin. Invest NASA Tech. Officer CASE Category
 R G BARILE KSC/W E LARSON 43-Chem Engr

NAG10-106 Florida Institute of Technology 3321
 RAPID SUSCEPTIBILITY TESTING OF MYCOBACTERIUM AVIUM
 COMPLEX AND TUBERCULOSIS ISOTATED AIDS PATIENT
Period Obligations
 06/01/1992-05/31/1994 FY94: \$0 TOTAL: \$99,996
Prin. Invest NASA Tech. Officer CASE Category
 A M DHOPE KSC/B WILLIAMS 56-Medical Sciences

NAS 5-32364 Florida Institute of Technology 3322
 TRMM GROUND TRUTH VALIDATION IN CENTRAL FLORIDA
 REGION
Period Obligations
 06/23/1994-03/22/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest NASA Tech. Officer CASE Category
 W L JONES GSFC/O J THIELE 31-Atmos Sci

NAS 8-39385 Florida Institute of Technology 3323
 MODEL-BASED REASONING FOR POWER SYSTEM MANAGEMENT
 USING KATE AND THE SSM/PMAD BREADBOARD
Period Obligations
 03/09/1992-12/31/1993 FY94: \$0 TOTAL: \$91,473
Prin. Invest NASA Tech. Officer CASE Category
 R A MORRIS MSFC/L F LOLLAR 45-Elec Engr
 MSFC/B K WALLS

NGT 00-050-967 Florida Institute of Technology 3324
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/30/1992-06/30/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest NASA Tech. Officer CASE Category
 R C WEIGEL KSC/B MARTIN 51-Biological Sci

NGT 00-051-086 Florida Institute of Technology 3325
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
 T D OSWALT HQ/D HOLLAND 42-Astro Engr

NAG 1-421 Florida State University 3326
 COMPUTATION OF LARGE TURBULENCE STRUCTURES AND NOISES
 OF SUPERSONIC JETS
Period Obligations
 12/01/1983-12/31/1994 FY94: \$75,000 TOTAL: \$715,962
Prin. Invest NASA Tech. Officer CASE Category
 C K TAM LARC/R A GOLUB 41-Aero Engr
 LARC/T D NORUM

NAG 1-862 Florida State University 3327
 SPECTRAL SOLUTION OF DISCONTINUOUS HYPERBOLIC PROB
 LEMS
Period Obligations
 03/14/1988-05/07/1994 FY94: \$1 TOTAL: \$164,769
Prin. Invest NASA Tech. Officer CASE Category
 D A KOPRIVA LARC/T A ZANG 41-Aero Engr
 LARC/A KUMAR

NAG 1-1312 Florida State University 3328
 INTIAL RESEARCH FOR TRACE-A
Period Obligations
 08/01/1991-02/28/1995 FY94: \$0 TOTAL: \$447,774
Prin. Invest NASA Tech. Officer CASE Category
 T N KRISHNAMURTI LARC/J FISHMAN 31-Atmos Sci
 H E FUELBERG LARC/J M HOELL

NAG 1-1497 Florida State University 3329
 BASIC INVESTIGATION OF FLUID-ACOUSTIC INTERACTIONS IN A
 SUPERSONIC RECTANGULAR JET EJECTOR
Period Obligations
 03/30/1993-07/31/1994 FY94: \$0 TOTAL: \$75,000
Prin. Invest NASA Tech. Officer CASE Category
 A KROTHAPALLI LARC/J M SEINER 41-Aero Engr
 C ROSS

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NAG 2-809 Florida State University 3330
AN INVESTIGATION OF THE UNCERTAINTIES IN VELOCITY AND VORTICITY ESTIMATES USING PIV
Period Obligations
10/13/1992-09/30/1994 FY94: \$35,361 TOTAL: \$103,947
Prin. Invest. NASA Tech. Officer CASE Category
L LOURENCO ARC/Y C CHO 46-Mech Engr

NAG 5-1869 Florida State University 3338
COMPARISON OF RADAR-DERIVED MICROPHYSICAL FIELDS WITH OTHER OBSERVATIONS
Period Obligations
01/24/1992-01/31/1995 FY94: \$50,000 TOTAL: \$199,971
Prin. Invest. NASA Tech. Officer CASE Category
P S RAY GSFC/G M HEYMSFIELD 31-Atmos Sci

NAG 3-1267 Florida State University 3331
DIRECT NUMERICAL SIMULATION OF HIGH-SPEED JET FLOW AND NOISE RADIATION
Period Obligations
04/05/1991-11/30/1995 FY94: \$80,000 TOTAL: \$300,000
Prin. Invest. NASA Tech. Officer CASE Category
K W TAM LERC/D L HUFF 41-Aero Engr

NAG 5-2072 Florida State University 3339
QUANTIFYING THE RESPONSE OF A BIOSPHERE-BOUNDARY LAYER-RADIATIVE TRANSFER PROCESS MODEL TO . . .
Period Obligations
08/25/1992-02/28/1995 FY94: \$75,000 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
E A SMITH GSFC/F G HALL 39-Env Sci, NEC

NAG 3-1284 Florida State University 3332
THEOR STUDIES OF RESID ACCEL INA MICROGRAV ENVIR: STOCHASTIC FORMULATION OF FLUID FLOW PHENOMENA
Period Obligations
06/14/1991-09/08/1995 FY94: \$180,000 TOTAL: \$636,196
Prin. Invest. NASA Tech. Officer CASE Category
J VINALS LERC/T K GLASGOW 47-Materials Engr

NAG 5-2447 Florida State University 3340
QUALITY ASSURANCE OF BOREAS NET RADIATION MEASUREMENT
Period Obligations
11/30/1993-11/30/1994 FY94: \$159,800 TOTAL: \$159,800
Prin. Invest. NASA Tech. Officer CASE Category
E A SMITH GSFC/F G HALL 39-Env Sci, NEC
GSFC/P J SELLERS

NAG 5-815 Florida State University 3333
PROGNOSTIC AND DIAGNOSTIC STUDIES OF WAVE-MEAN FLOW AND MEAN-MEA FLOW INSTRUCTIONS
Period Obligations
07/15/1986-11/14/1994 FY94: \$26,000 TOTAL: \$627,714
Prin. Invest. NASA Tech. Officer CASE Category
R L PFEFFER GSFC/M HELFAND 31-Atmos Sci

NAG 5-2468 Florida State University 3341
CLIMATE VARIATION WITH MULTIPLE TIME SCALES
Period Obligations
01/07/1994-06/30/1995 FY94: \$54,875 TOTAL: \$54,875
Prin. Invest. NASA Tech. Officer CASE Category
H WENG GSFC/W K LAU 31-Atmos Sci

NAG 5-1587 Florida State University 3334
APPLICATION OF TRMM DATA TO THE STUDY OF AFRICAN CLIMATE
Period Obligations
05/23/1991-01/14/1995 FY94: \$11,000 TOTAL: \$188,770
Prin. Invest. NASA Tech. Officer CASE Category
S E NICHOLSON GSFC/D SHORT 31-Atmos Sci

NAG 5-2672 Florida State University 3342
VERTICALLY RESOLVED PRECIPITATION RETRIEVAL USING PASSIVE MICROWAVE ONLY AND COMBINED PASSIVE MICRO
Period Obligations
08/11/1994-08/14/1995 FY94: \$105,000 TOTAL: \$105,000
Prin. Invest. NASA Tech. Officer CASE Category
E SMITH GSFC/A NEGRI 31-Atmos Sci

NAG 5-1595 Florida State University 3335
USE OF MICROWAVE RAINFALL AND PRECIPITABLE WATER ESTIMATES IN GLOBAL MODEL INITIALIZATION AND PRE..
Period Obligations
05/13/1991-05/31/1995 FY94: \$91,805 TOTAL: \$322,715
Prin. Invest. NASA Tech. Officer CASE Category
T N KRISHNAMURTI GSFC/W LAU 31-Atmos Sci

NAG 5-2719 Florida State University 3343
GROUND TRUTH FOR TRMM IN FLORIDA
Period Obligations
09/08/1994-09/14/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
P S SMITH GSFC/O THIELE 51-Biological Sci

NAG 5-1602 Florida State University 3336
STUDY OF VERTICALLY RESOLVED PRECIPITATION RETRIEVAL FROM DECONVOLVED PASSIVE MICROWAVE MEASUREMENT
Period Obligations
05/13/1991-05/31/1994 FY94: \$0 TOTAL: \$249,800
Prin. Invest. NASA Tech. Officer CASE Category
E A SMITH GSFC/A NEGRI 31-Atmos Sci

NAG 8-911 Florida State University 3344
THE EVALUATION AND USE OF GOES-IM WATER VAPOR PRODUCTS FOR HYDROLOGIC PROCESS STUDIES
Period Obligations
05/21/1992-07/01/1995 FY94: \$50,377 TOTAL: \$156,174
Prin. Invest. NASA Tech. Officer CASE Category
H E FUELBERG MSFC/A GUILLORY 31-Atmos Sci
MSFC/J E ARNOLD

NAG 5-1660 Florida State University 3337
VARIATIONAL DATA ASSIMILATION WITH SEMI-IMPLICIT SEMI-LAGRANGIAN SHALLOW WATER EQUATION MODEL
Period Obligations
07/15/1991-05/31/1995 FY94: \$134,000 TOTAL: \$363,906
Prin. Invest. NASA Tech. Officer CASE Category
I M NAVON GSFC/J R BATES 31-Atmos Sci

NAG 8-914 Florida State University 3345
TROPICAL ANALYSIS AND PREDICTION IMPACT STUDY FROM SATELLITE OBSERVATIONS
Period Obligations
05/26/1992-05/31/1995 FY94: \$90,000 TOTAL: \$271,180
Prin. Invest. NASA Tech. Officer CASE Category
T N KRISHNAMURTI MSFC/D FITZJARRALD 31-Atmos Sci

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NAG 8-916 Florida State University 3346
ANALYSIS OF SURFACE AND LAND ATMOSPHERE BUDGET MEASUREMENTS
Period *Obligations*
06/03/1992-05/31/1995 FY94: \$59,850 TOTAL: \$170,900
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E A SMITH MSFC/S J GOODMAN 31-Atmos Sci

NAGW 3109 Florida State University 3354
SATELLITE STUDIES OF PRECIPITATION AND EVAPOTRANSPIRATION FEEDBACK
Period *Obligations*
06/17/1992-06/30/1994 FY94: \$0 TOTAL: \$142,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E A SMITH HQ/R E MURPHY 31-Atmos Sci
HQ/D E WICKLAND

NAG 8-942 Florida State University 3347
RESEARCH STUDY
Period *Obligations*
12/15/1992-12/31/1993 FY94: \$0 TOTAL: \$14,241
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
H E FUELBERG MSFC/G J JEDLOVEC 31-Atmos Sci
MSFC/J E ARNOLD

NAGW 3326 Florida State University 3355
THEORETICAL STUDIES OF THE TRANSITION IN LIQUID
Period *Obligations*
01/06/1993-12/31/1994 FY94: \$60,000 TOTAL: \$120,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E MANOUSAKIS HQ/M C LEE 12-Chemistry

NAGW 985 Florida State University 3348
DATA ASSIMUL. IN OCEAN CIRCULATION
Period *Obligations*
11/01/1986-04/30/1994 FY94: \$0 TOTAL: \$993,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J J O'BRIEN HQ/G S LAGERLOEF 33-Oceanography
HQ/W S WILSON

NAGW 3495 Florida State University 3356
NAGW-3495/FLORIDA STATE UNIV/MARINE PHYTOPLANKTON ANNUAL CARBON PRODUCTION, NEW NITROGEN PRODUCTION
Period *Obligations*
04/22/1993-12/31/1994 FY94: \$45,000 TOTAL: \$55,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R IVERSON HQ/R E MURPHY 33-Oceanography
HQ/D M BUTLER

NAGW 991 Florida State University 3349
MODELING OF MICROWAVE RADIATIVE TRANSFER
Period *Obligations*
09/30/1986-10/31/1993 FY94: \$0 TOTAL: \$625,686
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E A SMITH HQ/J C DODGE 31-Atmos Sci
HQ/A TUYAHOV

NAGW 3855 Florida State University 3357
FLORIDA STATE UNIV - CONTROLS ON METHANE EMISSIONS FROM VEGETATED WETLANDS: SUBSTRATE, OXIDATION, TRAN
Period *Obligations*
01/13/1994-09/30/1996 FY94: \$50,000 TOTAL: \$50,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J CHANTON HQ/D E WICKLAND 39-Env Sci, NEC
HQ/A C JANETOS

NAGW 1823 Florida State University 3350
CARBON AND HYDROGEN ISOTOPIC COMPOSITION OF METHANE
Period *Obligations*
08/28/1989-12/31/1993 FY94: \$0 TOTAL: \$201,742
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J P CHANTON HQ/M J KURYLO 33-Oceanography
HQ/R T WATSON

NAGW 3970 Florida State University 3358
WETNET INTERCOMPARISON-VALIDATION STUDIES OF SSM PRECIPITATION OF RETRIEVAL ALGORITHMS
Period *Obligations*
04/25/1994-06/30/1996 FY94: \$160,000 TOTAL: \$160,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E A SMITH HQ/J C DODGE 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 1871 Florida State University 3351
ROCK-INHABITING MICROORGANISMS IN HOT AND COLD DESERTS
Period *Obligations*
10/18/1989-10/14/1993 FY94: \$0 TOTAL: \$410,370
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E I FRIEDMANN HQ/J D RUMMEL 54-Env Biology

NAGW 4044 Florida State University 3359
SIBERIAN PERMAFROST: APPLICATIONS TO MARS
Period *Obligations*
08/22/1994-05/31/1995 FY94: \$110,052 TOTAL: \$110,052
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E I FRIEDMANN HQ/M MEYER 51-Biological Sci

NAGW 3087 Florida State University 3352
EASTERN BOUNDARY EFFECTS ON GENERAL CIRCULATION STRUCTURE
Period *Obligations*
05/29/1992-05/31/1995 FY94: \$73,540 TOTAL: \$212,367
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
W K DEWAR HQ/D ADAMEC 31-Atmos Sci
HQ/R A SCHIFFER

NGT 00-030-056 Florida State University 3360
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/30/1991-12/31/1993 FY94: \$0 TOTAL: \$43,959
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
C A JONES HQ/D M BUTLER 33-Oceanography
J O'BRIEN HQ/G S WILSON

NAGW 3101 Florida State University 3353
AFRICAN CLIMATE AND VEGETATION STUDIES RELATED TO THE HAPEX-SAHEL EXPERIMENT
Period *Obligations*
06/22/1992-09/30/1994 FY94: \$23,161 TOTAL: \$54,818
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
S E NICHOLSON HQ/R E MURPHY 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-170 Florida State University 3361
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/23/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J CHANTON HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NGT 00-030-214 Florida State University 3362
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/25/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
H E FUELBERG HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-050-653 Florida State University 3363
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/30/1990-08/26/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J J O'BRIEN HQ/F C OWENS 33-Oceanography

NGT 00-050-983 Florida State University 3364
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
11/27/1992-12/14/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
H E FUELBERG KSC/B MILLER 31-Atmos Sci

NGT 00-070-062 Florida State University 3365
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
12/01/1987-07/31/1993 FY94: TOTAL: \$84,470
Prin. Invest. NASA Tech. Officer CASE Category
S E NICHOLSON HQ/F C OWENS 31-Atmos Sci

NGT 00-070-258 Florida State University 3366
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
06/16/1992-07/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
T N KRISHNAMURTI MSFC/F SIX 46-Mech Engr

NGT 00-070-273 Florida State University 3367
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
07/15/1992-07/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
S NICHOLSON GSFC/G SOFFEN 31-Atmos Sci

NGT 00-090-108 Florida State University 3368
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
T J HARRISON HQ/D K RUSSELL 99-Multi-Discip

NAG 1-1402 The University of Central Florida 3369
VORTEX MIXING IN COMPRESSIBLE FLOW
Period Obligations
02/20/1992-05/21/1994 FY94: \$0 TOTAL: \$44,998
Prin. Invest. NASA Tech. Officer CASE Category
L CHEW LARC/S K ROBINSON 41-Aero Engr

NAG 1-1502 The University of Central Florida 3370
NEW DIODE PUMPED SOLID STATE LASERS
Period Obligations
04/27/1993-04/30/1994 FY94: \$1 TOTAL: \$30,001
Prin. Invest. NASA Tech. Officer CASE Category
B CHAI LARC/J C BARNES 47-Materials Engr
G LUTTE LARC/W E MILLER

NAG 2-4005 The University of Central Florida 3371
ABOVE REAL TIME TRAINING ABOVE REAL-TIME TRAINING (ARTT) OF EMERGENCY
Period Obligations
05/11/1994-07/31/1995 FY94: \$60,070 TOTAL: \$60,070
Prin. Invest. NASA Tech. Officer CASE Category
D GUCKENBERGER ARC/J KOLF 49-Engr, NEC
W SWART ARC/J GERA

NAG10-82 The University of Central Florida 3372
AN SPE OXYGEN CONCENTRATOR
Period Obligations
05/13/1991-01/12/1994 FY94: \$0 TOTAL: \$126,220
Prin. Invest. NASA Tech. Officer CASE Category
A T RAISSI KSC/J ALIBERTI 46-Mech Engr

NAG10-94 The University of Central Florida 3373
THE USE OF A WATER RINSE TO DETERMINE THE STATE OF CLEANLINESS OF A SURFACE
Period Obligations
11/29/1991-01/28/1995 FY94: \$40,000 TOTAL: \$189,283
Prin. Invest. NASA Tech. Officer CASE Category
C A CLAUSEN KSC/P WELCH 12-Chemistry

NAG10-101 The University of Central Florida 3374
DEVELOPMENT AND IMPLEMENTATION OF INDUSTRIAL ENGINEERING IN SHUTTLE PROCESSING OPERATIONS
Period Obligations
03/30/1992-03/29/1995 FY94: \$120,000 TOTAL: \$471,482
Prin. Invest. NASA Tech. Officer CASE Category
W W SWART KSC/T S BARTH 41-Aero Engr

NAG10-115 The University of Central Florida 3375
INVESTIGATION OF INTELLIGENT VISUAL DATA BASE MANAGEMENT SYSTEMS (IVBMS)
Period Obligations
01/15/1993-01/14/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
J M RAGUSA KSC/N E SILWG 99-Multi-Discip

NAG10-116 The University of Central Florida 3376
INVESTIGATION INTELLIGENT MULTIMEDIA ELECTRONIC MEETING SUPPORT TECHNOLOGIES
Period Obligations
01/15/1993-01/14/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
J M RAGUSA KSC/N E SLIWA 45-Elec Engr

NAG10-117 The University of Central Florida 3377
DEVELOPMENT OF A NONDESTRUCTIVE VIBRATION TECHNI- QUE FOR BOND ASSESSMENT OF SPACE SHUTTLE TILES
Period Obligations
01/15/1993-01/14/1995 FY94: \$75,000 TOTAL: \$280,680
Prin. Invest. NASA Tech. Officer CASE Category
E A MOSLEKY KSC/R M DAVIS 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NAG10-118 The University of Central Florida 3378
INTER-FACILITY COMPARISON AND EXTERNAL BENCHMARKING OF
PRODUCTIVITY AND PERFORMANCE IN SHUTTLE PROCESSNG
Period Obligations
01/15/1993-01/15/1995 FY94: \$75,000 TOTAL: \$130,000
Pnn. Invest. NASA Tech. Officer CASE Category
W W SWART KSC/T S BARTH 99-Multi-Discip

NAG10-119 The University of Central Florida 3379
TEAM PERFORMANCE AND TEAM INTERACTION IN SHUTTLE
PROCESSING OPERATIONS
Period Obligations
01/15/1993-01/15/1995 FY94: \$0 TOTAL: \$34,994
Pnn. Invest. NASA Tech. Officer CASE Category
W W SWART KSC/J S BARTH 99-Multi-Discip

NAG10-120 The University of Central Florida 3380
AUTOMATED DATA BASE DESIGN FROM NATURAL LANGUAGE
INPUT
Period Obligations
01/15/1993-01/14/1995 FY94: \$90,000 TOTAL: \$180,000
Pnn. Invest. NASA Tech. Officer CASE Category
F GOMEZ KSC/C DELAUNE 99-Multi-Discip

NAG10-121 The University of Central Florida 3381
MATERIALS PERFORMANCE AND EVALUATION
Period Obligations
01/15/1993-01/15/1995 FY94: \$0 TOTAL: \$50,000
Pnn. Invest. NASA Tech. Officer CASE Category
D V DESAI KSC/R LEE 47-Materials Engr

NAG10-123 The University of Central Florida 3382
RENEWABLE HYDROGEN PRODUCTION AND APPLICATIONS
PROGRAM
Period Obligations
06/15/1993-12/19/1994 FY94: \$50,500 TOTAL: \$75,500
Pnn. Invest. NASA Tech. Officer CASE Category
D L BLOCK KSC/A L BAIN 43-Chem Engr

NAG10-126 The University of Central Florida 3383
ANALYSIS OF MAGNETIC FIELD LEVELS FROM AC HIGH AND LOW
VOTAGE POWERLINES AND PANELS AT KSC
Period Obligations
07/15/1993-08/08/1994 FY94: \$0 TOTAL: \$50,000
Pnn. Invest. NASA Tech. Officer CASE Category
C G CHRISTODOULOU KSC/J E HANLON 45-Elec Engr

NAG10-128 The University of Central Florida 3384
DYNAMIC EXCITATION OF GROUND SUPPORT STRUCTURES FROM
SPACE SHUTTLE LIFTOFF
Period Obligations
12/01/1993-11/30/1994 FY94: \$59,997 TOTAL: \$59,997
Pnn. Invest. NASA Tech. Officer CASE Category
W F CARROLL KSC/T I YANG 44-Civil Engr

NAG10-132 The University of Central Florida 3385
ELECTRONIC PERFORMANCE SUPPORT SYSTEMS (EPSS)
RESEARCH APPLICATIONS
Period Obligations
01/26/1994-01/30/1995 FY94: \$120,000 TOTAL: \$120,000
Pnn. Invest. NASA Tech. Officer CASE Category
J M RAGUSA KSC/N SLIWA 22-Computer Science

NAG10-136 The University of Central Florida 3386
INTEGRATING AEROSPACE TECHNOLOGY INTO CIRRICULUM
Period Obligations
05/11/1994-08/05/1994 FY94: \$95,974 TOTAL: \$95,974
Pnn. Invest. NASA Tech. Officer CASE Category
S DUTCZAK KSC/J HODGES 41-Aero Engr

NAG10-141 The University of Central Florida 3387
VARIABLE FORM DATA COLLECTION AND ANALYSIS
Period Obligations
06/21/1994-06/20/1995 FY94: \$99,036 TOTAL: \$99,036
Pnn. Invest. NASA Tech. Officer CASE Category
W W SWART KSC/T BARTH 22-Computer Science

NCC10-3 The University of Central Florida 3388
COOPERATIVE AGREEMENT FOR TECHNOLOGY DEVELOPMENT
Period Obligations
12/12/1989-12/23/1993 FY94: \$0 TOTAL: \$2,691,375
Pnn. Invest. NASA Tech. Officer CASE Category
S L RICE KSC/T DAVIS 99-Multi-Discip

NGT 00-051-099 The University of Central Florida 3389
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/05/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
W SMART KSC/B MARTIN 49-Engr, NEC

NGT 00-060-002 The University of Central Florida 3390
SUMMER FACULTY FELLOWSHIP PROGRAM RESEARCH
Period Obligations
03/31/1988-04/30/1995 FY94: \$439,484 TOTAL: \$2,060,695
Pnn. Invest. NASA Tech. Officer CASE Category
L A ANDERSON HQ/A S MCGEE 49-Engr, NEC
HQ/E T SCHWARTZ

NGT 00-090-046 The University of Central Florida 3391
NASA SCHOLARS
Period Obligations
08/20/1991-08/31/1995 FY94: \$24,000 TOTAL: \$108,276
Pnn. Invest. NASA Tech. Officer CASE Category
J SMITH HQ/B WHITE 49-Engr, NEC
S RICE

NGT 00-090-059 The University of Central Florida 3392
SUMMER PROGRAM FOR ACADEMIC CAREERS IN ENGINEERING
(SPACE)
Period Obligations
03/31/1992-03/31/1995 FY94: \$73,032 TOTAL: \$192,050
Pnn. Invest. NASA Tech. Officer CASE Category
S RICE HQ/B WHITE 49-Engr, NEC
J A SMITH

NGT 00-090-121 The University of Central Florida 3393
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/26/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Pnn. Invest. NASA Tech. Officer CASE Category
J A SMITH HQ/D K RUSSELL 99-Multi-Discip

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NGT 00-090-122 The University of Central Florida 3394
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/26/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J SMITH HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-159 The University of Central Florida 3395
NASA KSC/UCF SPACE SCHOLARS PROGRAM
Period *Obligations*
05/20/1993-05/31/1995 FY94: \$73,300 TOTAL: \$121,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A SMITH HQ/J M MACKALL 49-Engr, NEC

NGT 00-090-170 The University of Central Florida 3396
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/09/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J SMITH HQ/D K RUSSELL 99-Multi-Discip

NAG 1-609 University of Florida 3397
INVESTIGATION OF TEMPERATURE AND CONCENTRATION
OSCILLATIONS IN THE DIRECTIONAL SOLIDIFICATION OF PB SN
Period *Obligations*
07/12/1985-12/31/1994 FY94: \$0 TOTAL: \$523,284
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J ANDERSON LARC/A L FRIPP 13-Physics
R NARAYANAN

NAG 1-1226 University of Florida 3398
MODELING STIFFNESS AND STRENGTH PROPERTIES OF TEXT ILE
STRUCTURAL COMPOSITES D
Period *Obligations*
02/08/1991-09/30/1995 FY94: \$60,987 TOTAL: \$221,891
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B V SANKAR LARC/W C JACKSON 47-Materials Engr
LARC/C C POE

NAG 1-1394 University of Florida 3399
APPLIED AERODYNAMICS EXPERIENCE FOR SECONDARY SCIENCE
TEACHERS AND STUDENTS
Period *Obligations*
04/22/1992-04/13/1995 FY94: \$25,000 TOTAL: \$110,379
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A JD LARC/R L YANG 49-Engr, NEC
CARROLL LARC/E J PRIOR

NAG 1-1474 University of Florida 3400
A STUDY OF THE INTERACTION OF CONVECTION WITH
SOLIDIFICATION
Period *Obligations*
01/12/1993-01/10/1995 FY94: \$60,034 TOTAL: \$120,160
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J ANDERSON LARC/A L FRIPP 19-Phys Sci, NEC
R NARAYANAN

NAG 1-1486 University of Florida 3401
APPLICATION OF PRESSURE-SENSITIVE PAINT TO MASS BLEED
INDUCED OSCILLATIONS TO SHOCK/BOUNDARY LAYER
Period *Obligations*
02/17/1993-02/11/1995 FY94: \$40,000 TOTAL: \$87,191
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B F CARROL LARC/W L SELLERS 41-Aero Engr

NAG 2-667 University of Florida 3402
CONTINUED TESTING OF THE GALILEO LIGHTNING AND RA DIO
EMISSION DETECTOR
Period *Obligations*
10/09/1990-11/30/1994 FY94: \$34,886 TOTAL: \$172,638
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A UMAN ARC/L E LASHER 31-Atmos Sci
ARC/R E YOUNG

NAG 2-837 University of Florida 3403
BASIC AND APPLIED RESEARCH ON ION TRAP TANDEM MASS
SPECTROMETRIC SYSTEMS
Period *Obligations*
05/24/1993-08/31/1994 FY94: \$0 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A YOST ARC/C M WONG 12-Chemistry
ARC/E P CONDON

NAG 3-1096 University of Florida 3404
IN-SITU MONITORING OF CRYSTAL GROWTH USING MEPHIST O
Period *Obligations*
12/26/1989-10/14/1994 FY94: \$8,000 TOTAL: \$714,022
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J ABBACHIAN LERC/G J SANTORO 47-Materials Engr
F EBRAHIMI
A B GOKHALE

NAG 3-1113 University of Florida 3405
NUM PRED OF AIRBLAST/ASSIST FUEL INJ IN RICH BURN/ QUICK
QUENCH/LEAN BURN HI SPEED CIV TRANS COMBS
Period *Obligations*
01/04/1990-02/10/1995 FY94: \$85,000 TOTAL: \$402,965
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J MICKLOW LERC/H L NGUYEN 12-Chemistry

NAG 3-1187 University of Florida 3406
EJECTOR CODE CALIBRATION
Period *Obligations*
06/18/1990-05/06/1994 FY94: \$0 TOTAL: \$156,560
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V P ROAN LERC/L A BURKARDT 41-Aero Engr
W E LEAR/C A
SNYDER

NAG 3-1293 University of Florida 3407
NUCLEAR GAS CORE PROPULSION PROGRAM
Period *Obligations*
07/25/1991-12/31/1993 FY94: \$0 TOTAL: \$140,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N J DIAZ LARC/J S CLARK 49-Engr, NEC
J ANGHAE LARC/J R STONE

NAG 3-1340 University of Florida 3408
LOW EMISSION COMBUSTOR NUMERICAL SIMULATION BY SUB
COMPACT SYNTHESIS
Period *Obligations*
03/24/1992-03/07/1995 FY94: \$64,999 TOTAL: \$175,179
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N S WINOWICH LERC/K P KUNDU 46-Mech Engr
LERC/J M DEUR

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NAG 3-1635 University of Florida 3409
MARANGONI EFFECTS ON THE BUBBLE DYNAMICS IN A PRES SURE
DRIVEN FLOW
Period Obligations
06/29/1994-06/28/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
C W PARK LERC/B S SINGH 43-Chem Engr

NAG 5-2614 University of Florida 3410
RAPID THERMAL PROCESSING OF SEMICONDUCTORS IN SPAC E
Period Obligations
06/23/1994-06/14/1995 FY94: \$85,000 TOTAL: \$85,000
Prin. Invest. NASA Tech. Officer CASE Category
T J ANDERSON GSFC/L R PURVES 47-Materials Engr
K JONES

NAG 5-2654 University of Florida 3411
DYNAMICAL INTERPRETATION OF THE BROAD SCALE, NARRO W
SCALE AND RESONANT STRUCTURE
Period Obligations
07/14/1994-07/14/1995 FY94: \$33,000 TOTAL: \$33,000
Prin. Invest. NASA Tech. Officer CASE Category
S F DERMOTT GSFC/D WEST 11-Astronomy

NAG 8-177 University of Florida 3412
DEV HIGH ACCURACY CORRECTION SCHEMES FOR FLOW WITH
STRONG SOURCE TERMS
Period Obligations
04/16/1991-06/28/1994 FY94: \$30,000 TOTAL: \$240,000
Prin. Invest. NASA Tech. Officer CASE Category
W SHYY MSFC/K TUCKER 41-Aero Engr

NAG 8-245 University of Florida 3413
JOVE
Period Obligations
08/20/1992-07/31/1993 FY94: \$0 TOTAL: \$19,947
Prin. Invest. NASA Tech. Officer CASE Category
R E WILSON MSFC/F SIX 11-Astronomy

NAG 8-280 University of Florida 3414
AUTOMATED SPACE ROBPTICS FOR SATELLITE RESCUE
Period Obligations
03/01/1993-12/31/1994 FY94: \$74,710 TOTAL: \$149,710
Prin. Invest. NASA Tech. Officer CASE Category
N FITZ-COY MSFC/F SIX 49-Engr, NEC

NAG 8-946 University of Florida 3415
FUNDAMENTALS OF THERMOMIGRATION OF LIQUID ZONES
THROUGH SOLIDS
Period Obligations
01/08/1993-01/06/1995 FY94: \$140,000 TOTAL: \$280,000
Prin. Invest. NASA Tech. Officer CASE Category
M J KAUFMAN MSFC/M F VOLZ 47-Materials Engr

NAG 8-1092 University of Florida 3416
JOVE
Period Obligations
09/12/1994-05/31/1995 FY94: \$21,025 TOTAL: \$21,025
Prin. Invest. NASA Tech. Officer CASE Category
S T GOTTESMAN MSFC/F SIX 11-Astronomy

NAG 9-440 University of Florida 3417
DYNAMICS OF DUST AND THE COSMIC DUST COLLECTION
FACILITY
Period Obligations
06/01/1990-09/01/1993 FY94: TOTAL: \$54,218
Prin. Invest. NASA Tech. Officer CASE Category
S F DERMOTT JSC/F HORZ 19-Phys Sci, NEC

NAG 9-630 University of Florida 3418
DYNAMICS OF DUST AND THE COSNIC DUST COLLECTION FA
CILITY
Period Obligations
08/10/1992-07/01/1995 FY94: \$20,000 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
S F DERMOTT JSC/F HORZ 11-Astronomy

NAGW 1923 University of Florida 3419
DYNAMICS OF SATELLITES AND DUST PARTICLES
Period Obligations
01/24/1990-09/30/1994 FY94: \$83,000 TOTAL: \$415,000
Prin. Invest. NASA Tech. Officer CASE Category
S F DERMOTT HQ/T A MAXWELL 32-Geological Sci

NAGW 2410 University of Florida 3420
ANALYSIS OF VOYAGER RADIO DATA FROM NEPTUNE
Period Obligations
03/15/1991-09/30/1994 FY94: \$0 TOTAL: \$160,159
Prin. Invest. NASA Tech. Officer CASE Category
T D CARR HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2482 University of Florida 3421
NAGW-2482/UNIV FLORIDA/OPTICAL PROPERTIES OF FLUFF Y
DUST-AGGREGATES IN COMET COMAE AND INTERPLANETARY
Period Obligations
05/23/1991-03/31/1994 FY94: \$0 TOTAL: \$165,186
Prin. Invest. NASA Tech. Officer CASE Category
B GUSTAFSON HQ/J T BERGSTRALH 11-Astronomy

NAGW 2524 University of Florida 3422
MESO-SCALE DYNAMICS OF THE BOREAL FOREST
Period Obligations
08/20/1991-12/31/1994 FY94: \$255,398 TOTAL: \$466,077
Prin. Invest. NASA Tech. Officer CASE Category
C S HOLLING HQ/R E MURPHY 39-Env Sci, NEC
L H GUNDERSON HQ/W S WILSON

NAGW 2775 University of Florida 3423
ORBIT BASED PROBABILITY CALCULATIONS OF THE ORIGIN S OF
STREAM METEORIDS AND DUST
Period Obligations
11/15/1991-10/31/1994 FY94: \$73,310 TOTAL: \$233,490
Prin. Invest. NASA Tech. Officer CASE Category
B A GUSTAFSON HQ/J BOYCE 32-Geological Sci

NAGW 2957 University of Florida 3424
SPECTROSCOPIC STUDIES OF POLYCYCLIC AROMATIC CATIO NS
IN MATRICES
Period Obligations
03/04/1992-03/31/1994 FY94: \$32,500 TOTAL: \$130,000
Prin. Invest. NASA Tech. Officer CASE Category
M T VALA HQ/L J CAROFF 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NAGW 3237 University of Florida 3425
NAGW-3237/UNIV FLORIDA/ANALYSIS OF THE IRAS SOLAR SYSTEM
DUST DATA
Period *Obligations*
10/21/1992-01/31/1995 FY94: \$6,000 TOTAL: \$11,000
Prin. Invest. NASA Tech. Officer CASE Category
S F DERMOTT HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 3570 University of Florida 3426
CLINICAL PRACTICE LIBRARY OF MEDICINE
Period *Obligations*
05/13/1993-10/06/1994 FY94: \$186,999 TOTAL: \$441,919
Prin. Invest. NASA Tech. Officer CASE Category
R R GRAMS HQ/R J WHITE 56-Medical Sciences

NAGW 3698 University of Florida 3427
DEVELOPMENT OF AN ECOLOGICAL ASSAY OF ECOSYSTEM AN D
ANIMAL COMMUNITY STRUCTURE
Period *Obligations*
08/03/1993-05/31/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
C S HOLLING HQ/D E WICKLAND 39-Env Sci, NEC
L H GUNDERSON HQ/A C JANETOS
K H REDFORD

NAGW 4015 University of Florida 3428
DECAMETRIC RADIO MONITORING OF COMETARY FRAGMENT
IMPACTS WITH JUPITER
Period *Obligations*
05/23/1994-02/28/1995 FY94: \$29,000 TOTAL: \$29,000
Prin. Invest. NASA Tech. Officer CASE Category
T CARR HQ/J RAHE 11-Astronomy

NAG10-41 University of Florida 3429
STUDY LIBRARY OF MEDICINE
Period *Obligations*
03/09/1987-03/06/1994 FY94: TOTAL: \$1,148,563
Prin. Invest. NASA Tech. Officer CASE Category
R R GRAMS KSC/A KOLLER 56-Medical Sciences

NAG10-100 University of Florida 3430
VOLATILE EVOLUTION FROM PLANTS GROWING IN A CLOSED
ENVIRONMENT
Period *Obligations*
03/16/1992-09/15/1994 FY94: \$0 TOTAL: \$9,995
Prin. Invest. NASA Tech. Officer CASE Category
D J CANTLIFFE KSC/W M KNOTT 51-Biological Sci

NAG10-102 University of Florida 3431
BASIC AND APPLIED RESEARCH ON MASS SPECTROMETRIC
SYSTEMS
Period *Obligations*
03/30/1992-10/31/1993 FY94: \$0 TOTAL: \$80,000
Prin. Invest. NASA Tech. Officer CASE Category
R A YOST KSC/W M KNOTT 59-Life Sci, NEC

NAG10-109 University of Florida 3432
DEVELOPMENT PROTOTYPE KIENSTATIC PLATFORM FOR APP-
LICATION TO SPACE AND GROUND SERVICING TANKS
Period *Obligations*
11/25/1992-09/30/1994 FY94: \$0 TOTAL: \$51,597
Prin. Invest. NASA Tech. Officer CASE Category
J DUFFY KSC/E RHODES 99-Multi-Discip

NAG10-133 University of Florida 3433
INTEGRATED DEVELOPMENTAL MODEL OF LIFE SUPPORT
CAPABILITIES OF WHEAT
Period *Obligations*
02/01/1994-07/31/1994 FY94: \$13,650 TOTAL: \$13,650
Prin. Invest. NASA Tech. Officer CASE Category
R DARNELL KSC/W M KNOTT 55-Agriculture Sci

NAG10-135 University of Florida 3434
IMPLEMENTATION OF MULTIPLE STATION ELECTRIC FIELD SYSTEM
FOR KSC OPERATIONS
Period *Obligations*
04/13/1994-04/14/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
E M THOMSON KSC/M SCOTT 45-Elec Engr

NAG10-145 University of Florida 3435
GENETICALLY ENGINEERED PLANT BIOMONITOR IN MICRO-
GRAVITY
Period *Obligations*
09/21/1994-09/30/1995 FY94: \$119,566 TOTAL: \$119,566
Prin. Invest. NASA Tech. Officer CASE Category
R J FERL KSC/W M KNOTT 55-Agriculture Sci

NAS 3-26314 University of Florida 3436
ULTRA HIGH TEMPERATURE REACTOR AND ENERGY CONVERSI
ON
Period *Obligations*
05/30/1991-05/07/1995 FY94: \$307,499 TOTAL: \$2,128,999
Prin. Invest. NASA Tech. Officer CASE Category
N J DIAZ LERC/H S BLOOMFIELD 13-Physics
F ANGHAIE
E T DUGAN

NASW 4676 University of Florida 3437
NASW-4676/UNIV OF FLORIDA/NASA RTTC LOCATED IN THE
SOUTHEAST REGION OF THE U.S.
Period *Obligations*
12/20/1991-12/31/1994 FY94: \$1,050,000 TOTAL: \$2,820,000
Prin. Invest. NASA Tech. Officer CASE Category
J R THORNTON HQ/F E PENARANDA 99-Multi-Discip

NASW 4888 University of Florida 3438
BASIC RESEARCH ON MICRO-GRAVITY FORCED CONVECTION
BOILING AND CONDENSATION
Period *Obligations*
05/12/1994-02/11/1995 FY94: \$81,866 TOTAL: \$81,866
Prin. Invest. NASA Tech. Officer CASE Category
J F KLAUSNER HQ/A B DOUGHERTY 19-Phys Sci, NEC

NAS10-11880 University of Florida 3439
ONSITE MEDICAL SUPPORT DURING STS LAUNCH AND LANDING
OPERATIONS
Period *Obligations*
01/30/1992-09/30/1994 FY94: \$125,000 TOTAL: \$323,719
Prin. Invest. NASA Tech. Officer CASE Category
R J MELKER KSC/I D LONG 56-Medical Sciences

NCC 2-825 University of Florida 3440
ROLE OF CORTICOSTEROIDS IN BONE LOSS DURING SPACE
FLIGHT
Period *Obligations*
09/09/1993-08/31/1994 FY94: \$99,852 TOTAL: \$149,852
Prin. Invest. NASA Tech. Officer CASE Category
T WRONSKI ARC/D R BUBENHEIM 51-Biological Sci
ARC/G C JAHNS

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NCC 3-255 University of Florida 3441
ELECTRO-OPT ACT MONOMERS: SYN AND CHAR OF THIN FILMS
OF LIQUID CRYSTALLIN SUBSTITUTED POLYACETYLENES
Period Obligations
03/04/1992-06/21/1995 FY94: \$34,675 TOTAL: \$91,389
Prin. Invest. NASA Tech. Officer CASE Category
R S DURAN LERC/M A MEADOR 12-Chemistry

NCC 8-20 University of Florida 3442
AN ELECTROCHEMICAL METHOD TO MEASURE DIFFUSIVITY IN
LIQUID METALS
Period Obligations
01/08/1993-01/06/1995 FY94: \$135,000 TOTAL: \$270,000
Prin. Invest. NASA Tech. Officer CASE Category
R NARAYANAN MSFC/D A WATRING 47-Materials Engr
T J ANDERSON
A L FRIP

NCC 8-32 University of Florida 3443
GULF COAST ALLIANCE TECHNOLOGY ACCESS SERVICES
Period Obligations
03/22/1994-03/21/1996 FY94: \$355,154 TOTAL: \$355,154
Prin. Invest. NASA Tech. Officer CASE Category
J R THORNTON MSFC/S LITTLE 49-Engr, NEC
W HUFFMAN
C JOHNSRUD

NCC 8-51 University of Florida 3444
NOVEL ELECTROCHEMICAL METHOD FLOW VISUALIZATION
Period Obligations
07/07/1994-07/06/1995 FY94: \$54,988 TOTAL: \$54,988
Prin. Invest. NASA Tech. Officer CASE Category
T J ANDERSON MSFC/P N PETERS 43-Chem Engr
R NARAYANAN MSFC/C E BANKS

NGT 00-040-015 University of Florida 3445
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
10/17/1989-01/31/1995 FY94: \$380,000 TOTAL: \$2,055,609
Prin. Invest. NASA Tech. Officer CASE Category
M A ELSEMBERG HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-805 University of Florida 3446
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1991-06/30/1994 FY94: \$0 TOTAL: \$59,129
Prin. Invest. NASA Tech. Officer CASE Category
J H HUNTER HQ/J ALEXANDER 11-Astronomy

NGT 00-050-815 University of Florida 3447
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/10/1991-06/30/1994 FY94: \$0 TOTAL: \$64,850
Prin. Invest. NASA Tech. Officer CASE Category
R E WILSON HQ/F C OWENS 11-Astronomy

NGT 00-050-959 University of Florida 3448
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/25/1992-07/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
H CAMPINS HQ/J K ALEXANDER 11-Astronomy

NGT 00-050-968 University of Florida 3449
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/23/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
D J CANTLIFFE KSC/W CAMP 55-Agriculture Sci

NGT 00-051-218 University of Florida 3450
GRAD STUDENT RESEARCHERS PROGRAM
Period Obligations
04/25/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R L DARNELL KSC/W MARTIN 55-Agriculture Sci

NGT 00-051-242 University of Florida 3451
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1994-08/11/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R NARAYANAN LERC/F MONTEGANI 43-Chem Engr

NGT 00-070-282 University of Florida 3452
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
06/21/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
M J KAUFMAN HQ/D K RUSSELL 47-Materials Engr

NGT 00-070-332 University of Florida 3453
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
06/29/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
T D CARR HQ/D K RUSSELL 11-Astronomy

NAG 1-1199 University of Miami 3454
RAILGUN STUDIES FOR NASA APPLICATIONS RAILGUN STUDIES
FOR NASA APPLICATIONS
Period Obligations
12/10/1990-09/30/1994 FY94: \$0 TOTAL: \$76,627
Prin. Invest. NASA Tech. Officer CASE Category
Y C THIO LARC/W I SCALLION 13-Physics
LARC/R D WITCOFAKI

NAG 1-1229 University of Miami 3455
CHEMICAL CLIMATOLOGY OF NITROGEN AND SULFUR SPECIES
OVER THE WESTERN NORTH PACIFIC: GROUND-BASED MEAS
Period Obligations
02/22/1991-02/28/1995 FY94: \$134,000 TOTAL: \$572,333
Prin. Invest. NASA Tech. Officer CASE Category
J M PROSPERO LARC/J W DREWRY 31-Atmos Sci
D L SAUOIE LARC/J M HOELL JR

NAG 5-1788 University of Miami 3456
EOS VERSION ZERO DAAC VERIFICATION
Period Obligations
10/18/1991-10/31/1994 FY94: \$78,941 TOTAL: \$221,666
Prin. Invest. NASA Tech. Officer CASE Category
R H EVANS GSFC/H K RAMAPRIYAN 39-Env Sci, NEC

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NAG 5-1945 University of Miami 3457
INTEGRATION OF SLR AND VLBI DATA TO OBTAIN VERY AC CURATE
HORIZONTAL AND VERTICAL MOTIONS
Period Obligations
03/12/1992-03/14/1995 FY94: \$55,000 TOTAL: \$158,000
Prin. Invest. NASA Tech. Officer CASE Category
C HARRISON GSFC/B G BILLS 32-Geological Sci

NAG 5-2207 University of Miami 3458
GPS GEODETIC MONITORING OF SOUTH AMERICA - NOZCA P LATE
CONVERGENCE (SNAPP)
Period Obligations
03/09/1993-03/14/1995 FY94: \$75,000 TOTAL: \$137,000
Prin. Invest. NASA Tech. Officer CASE Category
T H DIXON GSFC/B G BILLS 32-Geological Sci

NAG 5-2208 University of Miami 3459
VOLCANO MONITORING FOR ERUPTION PREDICTION AND FOR
ECASTING USING THE GLOBAL POSITIONING SYSTEM
Period Obligations
03/09/1993-03/14/1995 FY94: \$40,000 TOTAL: \$80,000
Prin. Invest. NASA Tech. Officer CASE Category
T H DIXON GSFC/B G BILLS 32-Geological Sci

NAG 5-2209 University of Miami 3460
PRESENT DAY KINEMATICS AND EVALUATION OF TRANSPENI
NSULA SLIP IN NORTHERN BAJA CALIFORNIA
Period Obligations
03/09/1993-03/14/1995 FY94: \$75,000 TOTAL: \$149,998
Prin. Invest. NASA Tech. Officer CASE Category
T H DIXON GSFC/B G BILLS 32-Geological Sci

NAGW 273 University of Miami 3461
AN INVESTIGATION OF THE UTILITY OF OCEAN COLOR IMAGERY
FOR DELINEATION OF OCEANIC PROCESSES IN THE
Period Obligations
11/01/1981-05/31/1996 FY94: \$306,434 TOTAL: \$2,890,582
Prin. Invest. NASA Tech. Officer CASE Category
O BROWN HQ/M R LEWIS 33-Oceanography
O B BROWN HQ/W S WILSON
R H EVANS

NAGW 1845 University of Miami 3462
MARINE PHYTOPLANKTON PRODUCTIVITY
Period Obligations
11/22/1989-12/31/1993 FY94: \$0 TOTAL: \$309,211
Prin. Invest. NASA Tech. Officer CASE Category
P A MATRAL HQ/M R LEWIS 33-Oceanography
HQ/W S WILSON

NAGW 2073 University of Miami 3463
AIR SEA GAS EXCHANGE FROM SATELLITE PLATFORM
Period Obligations
06/06/1990-09/30/1992 FY94: \$0 TOTAL: \$331,174
Prin. Invest. NASA Tech. Officer CASE Category
R A FINE HQ/M LEWIS 33-Oceanography
D B OLSON

NAGW 2426 University of Miami 3464
EVALUATION OF PHYSIOLOGICALLY-BASED ALGORITHMS FOR THE
REMOTE SENSING OF OCEAN PRIMARY PRODUCTIVITY
Period Obligations
04/16/1991-07/31/1995 FY94: \$105,000 TOTAL: \$427,000
Prin. Invest. NASA Tech. Officer CASE Category
W M BALCH HQ/M R LEWIS 33-Oceanography
HQ/D E WICKLAND

NAGW 2672 University of Miami 3465
EFFECT OF THE DIRECTIONAL WAVE SPECTRUM ON THE RET
RRIEVAL OF MARINE SURFACE WINDS FROM RADAR BACK
Period Obligations
08/30/1991-10/31/1994 FY94: \$0 TOTAL: \$135,142
Prin. Invest. NASA Tech. Officer CASE Category
H C GRABER HQ/W C PATZERT 51-Biological Sci
HQ/J S THEON

NAGW 3316 University of Miami 3466
APPLICATION OF HIGH RESOLUTION TOPOGRAPHIC AND REM OTE
SENSING DATA TO THE KINEMATICS OF FOLD-AND
Period Obligations
12/31/1992-12/31/1995 FY94: \$48,487 TOTAL: \$94,426
Prin. Invest. NASA Tech. Officer CASE Category
T DIXON HQ/M BALTUCK 32-Geological Sci

NAGW 3619 University of Miami 3467
AIR-SEA GAS FLUXES: A REMOTE SENSING/MODEL BASED
APPROACH
Period Obligations
06/15/1993-05/31/1995 FY94: \$144,783 TOTAL: \$226,413
Prin. Invest. NASA Tech. Officer CASE Category
D OLSEN HQ/R E MURPHY 33-Oceanography

NAGW 3765 University of Miami 3468
PHYSIOLOGICAL ECOLOGY OF DMSP AND DMS PRODUCTION BY
PHYTOPLANKTON
Period Obligations
11/18/1993-08/31/1996 FY94: \$195,701 TOTAL: \$195,701
Prin. Invest. NASA Tech. Officer CASE Category
P A MATRAI HQ/A C JANETOS 33-Oceanography
HQ/R T WATSON

NAGW 3775 University of Miami 3469
AVHRRR PATHFINDER SST ALGORITHM AND PROCESSING DEV
ELOPMENT AND VERIFICATION
Period Obligations
10/12/1993-09/30/1995 FY94: \$200,001 TOTAL: \$200,001
Prin. Invest. NASA Tech. Officer CASE Category
R H EVANS HQ/M E MAIDEN 33-Oceanography
HQ/D M BUTLER

NAS 5-30694 University of Miami 3470
MAINTENANCE AND OPERATION OF ATS-3 COMMUNICATION SYS
TEM (CONTRACT TRANSFERRED TO LEWIS RES. CNTR)
Period Obligations
05/23/1989-11/24/1994 FY94: \$0 TOTAL: \$495,443
Prin. Invest. NASA Tech. Officer CASE Category
O BROWN GSFC/R WALES 49-Engr, NEC

NAS 5-31361 University of Miami 3471
MODIS - INVESTIGATION
Period Obligations
01/15/1992-12/14/2001 FY94: \$550,000 TOTAL: \$1,055,000
Prin. Invest. NASA Tech. Officer CASE Category
O B BROWN GSFC/H OSEROFF 33-Oceanography

NAS 5-31362 University of Miami 3472
EOS/MODIS INVESTIGATION ENTITLED: 'PROCESSING/
CALIBRATION FOR OCEAN OBSERVATION WITH EOS/MODIS'
Period Obligations
12/13/1991-12/14/2001 FY94: \$777,000 TOTAL: \$1,712,000
Prin. Invest. NASA Tech. Officer CASE Category
R EVANS GSFC/H OSEROFF 31-Atmos Sci

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NAS 5-31363 University of Miami 3473
MODERATE RESOLUTION IMAGING SPECTROMETER
INVESTIGATION - OCEAN
Period *Obligations*
01/15/1992-12/14/2001 FY94: \$317,000 TOTAL: \$900,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
H GORDON GSFC/H OSEROFF 31-Atmos Sci

NAS 5-31734 University of Miami 3474
DEVELOPMENT FOR SEAWIFS
Period *Obligations*
11/22/1991-11/22/1994 FY94: \$159,000 TOTAL: \$369,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
H GORDAN GSFC/C MCLAIN 31-Atmos Sci

NAS 5-31745 University of Miami 3475
RESEARCH ALGORITHMS AND DESIGN, DEVELOPMENT, AND
VERIFICATION OF S/W FOR DATA SYSTEMS FOR SEAWIFS
Period *Obligations*
04/24/1992-04/21/1995 FY94: \$200,000 TOTAL: \$655,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R EVANS GSFC/G FELDMAN 33-Oceanography

NCC 2-843 University of Miami 3476
FLIGHT TRAINING FOR THE HIGH TECHNOLOGY TRANSPORT
COCKPIT
Period *Obligations*
01/31/1994-09/30/1994 FY94: \$172,128 TOTAL: \$172,128
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E L WIENER ARC/E A PALMER 69-Psych, NEC
ARC/S CASNER

NGT 00-030-026 University of Miami 3477
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/23/1990-02/28/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M C FORBES HQ/G ASRAR 33-Oceanography

NGT 00-030-114 University of Miami 3478
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/30/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
S A YVON HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-090-230 University of Miami 3479
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period *Obligations*
09/29/1993-08/14/1994 FY94: \$12,000 TOTAL: \$12,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
K Y FUNG HQ/D K RUSSELL 99-Multi-Discip

NAG 1-1104 University of South Florida 3480
COMPARISON OF 2 MEGOHM HOLMIUM AND 10 MEGOHM CAR-
BON OXYGEN 2 LIDAR FOR ATMOSPHERIC BACKSCATTER AND
Period *Obligations*
02/13/1990-03/31/1995 FY94: \$84,787 TOTAL: \$343,690
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D K KILLINGER LARC/N P BARNES 31-Atmos Sci
K CHAN LARC/J A WILLIAMS-BYRD

NAG 3-851 University of South Florida 3481
SOLAR DYNAMIC HEAT RECEIVER PROGRAM DVLPMT AND DESIG
OPTIMIZATION
Period *Obligations*
01/19/1988-11/30/1993 FY94: TOTAL: \$248,325
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R A CRANE LERC/M O DUSTIN 46-Mech Engr
LERC/L L KOHOUT

NAG 3-1112 University of South Florida 3482
NUMERICAL SIMULATION OF CHEMICAL KINETICS AND TURBUL
ENT EDDIES FOR FLOW IN COMBUSTOR
Period *Obligations*
01/10/1990-01/08/1995 FY94: \$0 TOTAL: \$141,273
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
S J BEN YING LERC/H L NGUYEN 43-Chem Engr

NAG 9-648 University of South Florida 3483
EVALUATION OF OVARIAN TUMOR CELL GROWTH AND GENE
EXPRESSION
Period *Obligations*
10/28/1992-03/01/1995 FY94: \$125,000 TOTAL: \$240,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J L BECKER JSC/G SPAULDING 51-Biological Sci

NAGW 465 University of South Florida 3484
DEV.OF IN SITE TO COMPLEMENT OCEAN COLOR REMOTE
SENSING
Period *Obligations*
05/05/1983-12/31/1996 FY94: \$200,996 TOTAL: \$1,627,184
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
K L CARDER HQ/M R LEWIS 33-Oceanography
HQ/W S WILSON

NAGW 3050 University of South Florida 3485
A PERMANENT MINORITY ENGINEERING PROGRAM FOR HILLS
BOROUGH COUNTY
Period *Obligations*
04/14/1992-10/31/1995 FY94: \$50,025 TOTAL: \$145,916
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R E HERRING HQ/B WHITE 49-Engr, NEC

NAGW 3459 University of South Florida 3486
SIMULATION ANALYSIS OF DISSOLVED AND PARTICULATE C
OMPONENTS
Period *Obligations*
03/31/1993-11/30/1994 FY94: \$210,000 TOTAL: \$410,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J L WALSH HQ/R E MURPHY 33-Oceanography
HQ/D M BUTLER

NAGW 3483 University of South Florida 3487
EVALUATION OF REGIONAL AND TEMPORAL VARIATION OF P
RIMARY PRODUCTIVITY IN CASE II OCEAN SHELF WATERS
Period *Obligations*
05/06/1993-12/31/1994 FY94: \$154,670 TOTAL: \$329,670
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
F MULLER-KARGER HQ/D E WICKLAND 33-Oceanography
HQ/A C JANETOS

**NASA'S UNIVERSITY PROGRAM
FLORIDA (Continued)**

NAGW 3618 University of South Florida 3488
INCORPORATION OF SEAWIFS DATA INTO COUPLED PHYSICAL/BIOLOGICAL MODELS OF THE ARABIAN SEA

Period	Obligations	
06/09/1993-03/31/1995	FY94: \$102,597	TOTAL: \$250,100
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M E LUTHER	HQ/R E MURPHY	33-Oceanography
	HQ/D M BUTLER	

NAGW 3950 University of South Florida 3489
INVESTIGATION OF THE RESPONSE OF THE ARABIAN SEA TO THE SOUTHWEST MONSOON USING AIRCRAFT AND SATELLITE

Period	Obligations	
04/21/1994-04/30/1997	FY94: \$99,643	TOTAL: \$99,643
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P G COBLE	HQ/A C JENETOS	33-Oceanography
P STEGMANN		

NAG10-76 University of South Florida 3490
DEVELOPMENT OF A LOAD MANAGEMENT THERMAL ENERGY STORAGE DEVICE

Period	Obligations	
07/16/1990-07/16/1994	FY94:	TOTAL: \$119,004
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A CRANE	KSC/J K O MALLEY	99-Multi-Discip

NAG10-130 University of South Florida 3491
BIOLOGICAL CHANGES FOLLOWING RECONNECTIONS OF BMCD/USFWS IMPOUNDMENTS AT KSC

Period	Obligations	
12/02/1993-12/03/1994	FY94: \$18,894	TOTAL: \$18,894
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K A FLANNING	KSC/W M KNOTT	51-Biological Sci

NAS 1-19508 University of South Florida 3492
DEVELOPMENT OF HIGH OPTICAL QUALITY, HIGH TEMP. SAPPHIRE FIBERS

Period	Obligations	
11/21/1991-12/21/1993	FY94: \$0	TOTAL: \$99,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R S CHANG	LARC/A J ZUCKERWAR	13-Physics
N DJEU		

NAS 3-26412 University of South Florida 3493
ACTS PROPAGATION EXPERIMENTS

Period	Obligations	
05/03/1993-08/01/1995	FY94: \$0	TOTAL: \$125,002
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R E HENNING	LERC/G J GUNDERMAN	19-Phys Sci, NEC

NAS 5-31716 University of South Florida 3494
EARTH OBSERVING SYSTEM MODIS/HIRIS TEAM MEMBER INVESTIGATION

Period	Obligations	
01/15/1992-12/14/2001	FY94: \$381,000	TOTAL: \$1,079,168
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K R CARDER	GSFC/H OSEROFF	31-Atmos Sci

NCC 5-50 University of South Florida 3495
DEVELOPMENT AND VALIDATION OF ACHLOROPHYLL A, SEAWATER ALGORITHM FOR CASE II WATERS

Period	Obligations	
09/02/1992-12/14/1993	FY94: \$0	TOTAL: \$74,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K L CARDER	GSFC/C R MCCLAIN	33-Oceanography
	GSFC/S B HOOKER	

NCC 8-31 University of South Florida 3496
TECHNOLOGY REINVESTMENT PROGRAM

Period	Obligations	
04/11/1994-04/10/1996	FY94: \$955,034	TOTAL: \$955,034
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S N BUSANSKY	MSFC/S LITTLE	45-Elec Engr
D C KEEZER		

NGT 00-050-979 University of South Florida 3497
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/14/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D K KILLINGER	LARC/E PRIOR	13-Physics

NGT 00-070-260 University of South Florida 3498
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
06/21/1992-07/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F M KARGER	SSC/A JOYCE	33-Oceanography

NGT 00-070-375 University of South Florida 3499
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
08/22/1994-06/30/1997	FY94: \$44,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D V LIM	HQ/D K RUSSELL	59-Life Sci, NEC

NGT 00-090-048 University of South Florida 3500
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
08/22/1991-08/31/1994	FY94: \$0	TOTAL: \$70,484
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J O'SHIELDS	HQ/B WHITE	49-Engr, NEC
K BOWYER		

NGT 00-090-060 University of South Florida 3501
PILOT BRIDGE PROGRAM FOR MINORITY ENGINEERING STUDENTS

Period	Obligations	
04/21/1992-03/31/1995	FY94: \$26,389	TOTAL: \$82,361
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A O'SHIELDS	HQ/B L WHITE	49-Engr, NEC

NGT 00-090-103 University of South Florida 3502
GRSP/UMF

Period	Obligations	
09/16/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J O'SHIELDS	HQ/D K RUSSELL	99-Multi-Discip

NCC 3-346 University of West Florida 3503
ION-EXCHANGE EQUILIBRIUM AND KINETIC PROPERTIES OF POLYACRYLIC FILMS AND APPLICATIONS TO CHEMICAL ANALYSIS

Period	Obligations	
04/12/1994-04/11/1995	FY94: \$15,000	TOTAL: \$15,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S P TANNER	LERC/K W STREET	12-Chemistry

NASA'S UNIVERSITY PROGRAM GEORGIA

GEORGIA

NAG 1-410 Clark Atlanta University 3504
CONSTRUCT FINITE DIFFERENCE SCHEMES HAVING SPACIAL
PROPERTIES FOR DIFFERENTIAL EQUATIONS
Period Obligations
09/19/1983-09/30/1993 FY94: TOTAL: \$897,323
Prin. Invest. NASA Tech. Officer CASE Category
R E MICKENS LARC/J N SHOOSMITH 21-Mathematics

NAG 3-1080 Clark Atlanta University 3505
METAL CONTAINING POLYMERS: ELECTROCATALYSIS
Period Obligations
01/22/1990-06/30/1994 FY94: \$0 TOTAL: \$149,584
Prin. Invest. NASA Tech. Officer CASE Category
J L REED LERC/P R PROKOPIUS 12-Chemistry

NAG 3-1394 Clark Atlanta University 3506
SUPERCONDUCTING MATERIALS PROCESSING
Period Obligations
12/04/1992-12/31/1995 FY94: \$113,279 TOTAL: \$458,723
Prin. Invest. NASA Tech. Officer CASE Category
T MENSAH LERC/S STECURA 19-Phys Sci, NEC

NAG 3-1411 Clark Atlanta University 3507
THE CONSTRUCTION OF FINITE DIFFERENCE SCHEMES HAVI NG
SPECIAL PROPERTIES
Period Obligations
12/31/1992-05/30/1996 FY94: \$95,000 TOTAL: \$258,864
Prin. Invest. NASA Tech. Officer CASE Category
R E MICKENS LERC/J W GOODRICH 21-Mathematics

NAGW 2939 Clark Atlanta University 3508
HIGH-PERFORMANCE POLYMERS AND CERAMICS
Period Obligations
03/13/1992-12/31/1994 FY94: \$1,600,000 TOTAL: \$4,294,873
Prin. Invest. NASA Tech. Officer CASE Category
E A MINTZ HQ/M S MARGOLIS 99-Multi-Discip

NCC 3-286 Clark Atlanta University 3509
ALKALI-LAYERED COMPOUNDS, INTERFACES FOR ENERGY CO
NVERSION AND ENERGY STORAGE
Period Obligations
01/11/1993-01/19/1995 FY94: \$181,511 TOTAL: \$348,777
Prin. Invest. NASA Tech. Officer CASE Category
C R HANDY LERC/A F HEPP 13-Physics
H L NEAL
C
PAPAGEORGOPOULOS

NGT 00-090-238 Clark Atlanta University 3510
CLARK ATLANTA UNIV; UNDERGRADUATE STUDEN T
RESEARCHERS PROGRAM
Period Obligations
11/17/1993-08/14/1994 FY94: \$12,000 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
I JENKINS HQ/D K RUSSELL 99-Multi-Discip

NAG 2-828 Emory University 3511
HETERGENEOUS DITRIBUTED COMPUTING FOR COMPUTATIONA L
AEROSCIENCES
Period Obligations
03/26/1993-03/31/1995 FY94: \$63,174 TOTAL: \$126,651
Prin. Invest. NASA Tech. Officer CASE Category
V S SUNDERAM ARC/T A LASINSKI 22-Computer Science
ARC/E BARSZCZ

NAS 2-10527 Emory University 3512
CARDIOVASCULAR ADAPTATION OF WHITE RATS TO DECREASED
GRAVITY OF SPACE SHUTTLE/SPACELAB INFLIGHT COND
Period Obligations
01/17/1980-11/30/1994 FY94: \$0 TOTAL: \$1,843,282
Prin. Invest. NASA Tech. Officer CASE Category
V POPOVIC ARC/G K SCHMIDT 51-Biological Sci

NAG 1-623 Georgia Institute of Technology 3513
HIGH SPEED PRECISION MOTION STRATEGIES FOR LIGHTWE IGH T
STRUCTURES
Period Obligations
11/15/1985-12/31/1992 FY94: TOTAL: \$268,830
Prin. Invest. NASA Tech. Officer CASE Category
W J BOOK LARC/D SOLOWAY 46-Mech Engr

NAG 1-637 Georgia Institute of Technology 3514
ANALYSIS OF DELAMINATION RELATED FRACTURE PROCESSE S
IN COMPOSITES
Period Obligations
02/18/1986-12/25/1992 FY94: \$0 TOTAL: \$345,000
Prin. Invest. NASA Tech. Officer CASE Category
L W REHFIELD LARC/T K O'BRIEN 47-Materials Engr
E A ARMANIOS LARC/G B MURRI

NAG 1-1007 Georgia Institute of Technology 3515
BASIC RESEARCH ON DESIGN ANALYSIS METHODS FOR
ROTORCRAFT VIBRATIONS
Period Obligations
07/03/1989-09/30/1992 FY94: TOTAL: \$107,057
Prin. Invest. NASA Tech. Officer CASE Category
S HANAGUD LARC/R G KVATERNIK 41-Aero Engr
J I CRAIG

NAG 1-1094 Georgia Institute of Technology 3516
MODELING OF COMPOSITE BEAMS AND PLATES FOR STATIC AND
DYNAMIC ANALYSIS
Period Obligations
01/18/1990-03/16/1993 FY94: TOTAL: \$189,071
Prin. Invest. NASA Tech. Officer CASE Category
D H HODGES LARC/H E HINNANT 41-Aero Engr

NAG 1-1139 Georgia Institute of Technology 3517
ANALYTICAL GUIDANCE LAW DEVELOPMENT FOR AEROCAPTURE
AT MARS.
Period Obligations
05/04/1990-04/30/1993 FY94: TOTAL: \$202,981
Prin. Invest. NASA Tech. Officer CASE Category
A J CALISE LERC/W T SUIT 41-Aero Engr
LERC/D D MOERDER

**NASA'S UNIVERSITY PROGRAM
GEORGIA (Continued)**

NAG 1-1213 Georgia Institute of Technology 3518
AIRBORNE MEASUREMENTS OF NO₂ AND NO_y AS RELATED
TO NASA'S PACIFIC EXPLORATORY MISSION
Period Obligations
02/19/1991-12/31/1995 FY94: \$226,567 TOTAL: \$1,199,283
Prin. Invest. NASA Tech. Officer CASE Category
J D BRADSHAW LARC/E V BROWELL 31-Atmos Sci
S T SANDHOLM LARC/A F CARTER

NAG 1-1451 Georgia Institute of Technology 3525
RESEARCH IN ROBUST CONTROL FOR HYPERSONIC VEHICLE NLPN
92-440R
Period Obligations
08/28/1992-08/31/1994 FY94: \$41,800 TOTAL: \$83,029
Prin. Invest. NASA Tech. Officer CASE Category
A J CALISE LARC/J D MCMINN 41-Aero Engr
LARC/I M GREGORY

NAG 1-1257 Georgia Institute of Technology 3519
GUIDANCE AND FLIGHT CONTROL LAW DEVELOPMENT FOR HY
PERSONIC VEHICLES.
Period Obligations
04/05/1991-09/30/1994 FY94: \$0 TOTAL: \$154,212
Prin. Invest. NASA Tech. Officer CASE Category
A J CALISE LARC/D D MOERDER 42-Astro Engr
LARC/W T SUIT

NAG 1-1517 Georgia Institute of Technology 3526
CONTINUED DEVELOPMENT AND APPLICATION OF CIRCULATION
CONTROL TECHNOLOGY FOR ADVANCED SUBSONIC
Period Obligations
06/14/1993-06/13/1995 FY94: \$99,750 TOTAL: \$149,729
Prin. Invest. NASA Tech. Officer CASE Category
R J ENGLAR LARC/E G WAGGONER 41-Aero Engr
LARC/Z T APPLIN

NAG 1-1319 Georgia Institute of Technology 3520
COMPUTATION MECHANICS OF COMPOSITE STRUCTURES
INCREMENTAL FUNDING THROUGH DECEMBER 31, 1991
Period Obligations
07/23/1991-07/31/1994 FY94: \$0 TOTAL: \$114,950
Prin. Invest. NASA Tech. Officer CASE Category
S N ATLURI LARC/J T WANG 46-Mech Engr
LARC/J M HOUSNER

NAG 1-1564 Georgia Institute of Technology 3527
NEW APPROACHES TO HSCT MULTIDISCIPLINARY DESIGN AND
OPTIMIZATION
Period Obligations
12/20/1993-12/31/1994 FY94: \$199,998 TOTAL: \$199,998
Prin. Invest. NASA Tech. Officer CASE Category
D P SCHRAGE LARC/R P WESTON 41-Aero Engr
R E FULTON LARC/J SOBIESKI
J I CRAIG

NAG 1-1397 Georgia Institute of Technology 3521
ROBUST STABILITY OF SECOND-ORDER SYSTEMS
Period Obligations
02/27/1992-02/23/1995 FY94: \$0 TOTAL: \$96,298
Prin. Invest. NASA Tech. Officer CASE Category
C H CHUANG LARC/J JUANG 42-Astro Engr
LARC/L G HORTA

NAG 1-1582 Georgia Institute of Technology 3528
ELEVATED TEMPERATURE CRACK GROWTH BEHAVIOR IN AL ALLOY
2519 AND ITS VARIANTS
Period Obligations
01/28/1994-11/27/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
A SAXENA LARC/R S PIASCIK 47-Materials Engr
LARC/J C NEWMAN JR.

NAG 1-1415 Georgia Institute of Technology 3522
AIRBORNE MEASUREMENTS OF NO₂, NO_y AS RELATED TO
NASA'S TRACE-A FIELD PROGRAM
Period Obligations
04/03/1992-06/30/1995 FY94: \$0 TOTAL: \$376,580
Prin. Invest. NASA Tech. Officer CASE Category
J BRADSHAW LARC/E V BROWELL 31-Atmos Sci
S SANDHOLT LARC/A F CARTER

NAG 1-1624 Georgia Institute of Technology 3529
RESEARCH INTO GENETIC ALGORITHMS FOR OPTIMIZATION AND
THE DESIGN OF THE GENETIC PROCESSOR
Period Obligations
04/21/1994-04/20/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
V K MADISETTI LARC/J H TUCKER 45-Elec Engr
LARC/S K STOVER

NAG 1-1435 Georgia Institute of Technology 3523
DEVELOPMENT OF AN HP-VERSION FINITE ELEMENT METHOD FOR
COMPUTATIONAL OPTIMAL CONTROL, NLPN 92-241
Period Obligations
04/22/1992-11/30/1994 FY94: \$39,902 TOTAL: \$105,303
Prin. Invest. NASA Tech. Officer CASE Category
D H HODGES LARC/D D MOERDER 42-Astro Engr
LARC/W T SUIT

NAG 1-1631 Georgia Institute of Technology 3530
MODELING MACRO - AND MICRO-SCALE TURBULENT MIXING AND
CHEMISTRY IN ENGINE EXHAUST PLUMES
Period Obligations
06/30/1994-06/30/1995 FY94: \$47,432 TOTAL: \$47,432
Prin. Invest. NASA Tech. Officer CASE Category
S MENON LARC/W L GROSE 31-Atmos Sci

NAG 1-1438 Georgia Institute of Technology 3524
DIAGNOSTIC MODELLING STUDIES OF THE HX OY-NX OY-03
PHOTOCHEMICAL SYSTEM AND ITS COUPLING TO SULFUR
Period Obligations
05/18/1992-05/17/1995 FY94: \$153,076 TOTAL: \$405,485
Prin. Invest. NASA Tech. Officer CASE Category
D D DAVIS LARC/J FISHMAN 31-Atmos Sci
W L CHAMEIDES LARC/J M HOELL

NAG 2-656 Georgia Institute of Technology 3531
ACQUISITION AND PRODUCTION OF SKILLED BEHAVIOR IN D
YNAMIC DECISION-MAKING TASKS
Period Obligations
08/03/1990-07/31/1993 FY94: \$0 TOTAL: \$233,935
Prin. Invest. NASA Tech. Officer CASE Category
A KIRLIK ARC/R J SHIVELY 69-Psych, NEC

NASA'S UNIVERSITY PROGRAM
GEORGIA (Continued)

NAG 2-700 Georgia Institute of Technology 3532
 SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE/MICROWAVE
 OBSERVING PROJECT: SKY SURVEY TEAM MEMBER

Period	Obligations
03/20/1991-08/31/1994	FY94: \$9,864 TOTAL: \$183,915
Prin. Invest.	NASA Tech. Officer CASE Category
P G STEFFES	ARC/D H BROCKER 11-Astronomy

NAG 3-1221 Georgia Institute of Technology 3540
 STABILITY AND INSTABILITY OF THERMOCAPILLARY CONVECTION
 IN MODELS OF THE FLOAT-ZONE CRYSTAL-GROWTH CO

Period	Obligations
11/29/1990-10/31/1992	FY94: \$3,436 TOTAL: \$257,436
Prin. Invest.	NASA Tech. Officer CASE Category
G P NEITZEL	LERC/R W VERNON 46-Mech Engr

NAG 2-806 Georgia Institute of Technology 3533
 DESIGN AND TECHNICAL SUPPORT OF DEVELOPMENT OF MOLDED
 FABRIC SPACE SUIT JOINT

Period	Obligations
10/07/1992-12/31/1994	FY94: \$0 TOTAL: \$79,287
Prin. Invest.	NASA Tech. Officer CASE Category
L H OLSON	ARC/H C VYKUKAL 49-Engr, NEC

NAG 3-1239 Georgia Institute of Technology 3541
 REVIEW OF THE TECHNOLOGY AND APPLICATION OF 4BA01CA0
 1A1203 IMPREGNATED CATHODES IN ION ENGINES / 5330

Period	Obligations
01/24/1991-05/09/1994	FY94: \$0 TOTAL: \$96,079
Prin. Invest.	NASA Tech. Officer CASE Category
W OHLINGER	LERC/G MACRAE 47-Materials Engr

NAG 2-869 Georgia Institute of Technology 3534
 COMPUTATIONAL STRATEGIES FOR 3-D FLOW SIMULATIONS ON
 DISTRIBUTED SYSTEMS

Period	Obligations
08/12/1993-08/14/1995	FY94: \$39,188 TOTAL: \$76,967
Prin. Invest.	NASA Tech. Officer CASE Category
L N SANKAR	ARC/T L HOST 41-Aero Engr

NAG 3-1454 Georgia Institute of Technology 3542
 CONTROL OF OSCILLATORY THERMOCAPILLARY CONVECTION IN
 MICROGRAVITY

Period	Obligations
02/17/1993-04/03/1995	FY94: \$133,000 TOTAL: \$283,000
Prin. Invest.	NASA Tech. Officer CASE Category
G P NEITZEL	LERC/R L THOMPSON 46-Mech Engr

NAG 2-890 Georgia Institute of Technology 3535
 THE DETECTION AND EXTRACTION OF INTERLEAVED CODE SEGMENTS

Period	Obligations
03/24/1994-09/30/1995	FY94: \$83,293 TOTAL: \$83,293
Prin. Invest.	NASA Tech. Officer CASE Category
S RUGABER	ARC/P E FRIEDLAND 22-Computer Science

NAG 3-1455 Georgia Institute of Technology 3543
 THE BEHAVIOR OF UNSTEADY THERMOCAPILLARY FLOWS

Period	Obligations
02/08/1993-03/01/1995	FY94: \$69,999 TOTAL: \$139,999
Prin. Invest.	NASA Tech. Officer CASE Category
M K SMITH	LERC/J P SKARDA 46-Mech Engr

NAG 2-900 Georgia Institute of Technology 3536
 EVALUATION OF HIGH SPEED CIVIL TRANSPORT (HSCT) METRICS
 USING THE TAGUCHI ROBUST DESIGN APPROACH AND A

Period	Obligations
05/12/1994-12/31/1994	FY94: \$75,000 TOTAL: \$75,000
Prin. Invest.	NASA Tech. Officer CASE Category
D P SCHRAGE	ARC/T L GALLOWAY 41-Aero Engr
	ARC/P A GELHAUSEN

NAG 3-1559 Georgia Institute of Technology 3544
 DIELECTRIC SPECTROSCOPY AS A MATERIALS PROBE

Period	Obligations
02/02/1994-02/01/1995	FY94: \$75,000 TOTAL: \$75,000
Prin. Invest.	NASA Tech. Officer CASE Category
R A GERHARDT	LERC/A VARY 47-Materials Engr

NAG 3-768 Georgia Institute of Technology 3537
 STUDIES OF UNSTEADY VISCOUS FLOWS USING A TWO-EQUATION
 MODEL OF TURBULENCE

Period	Obligations
12/18/1986-12/31/1994	FY94: \$0 TOTAL: \$241,047
Prin. Invest.	NASA Tech. Officer CASE Category
L N SANKAR	LERC/M G POTAPCZUK 49-Engr, NEC
J C WU	

NAG 3-1571 Georgia Institute of Technology 3545
 THREE-DIMENSIONAL AEROELASTIC ANALYSIS OF MISTUNED
 BLADED-DISK ASSEMBLIES

Period	Obligations
02/15/1994-02/14/1995	FY94: \$73,103 TOTAL: \$73,103
Prin. Invest.	NASA Tech. Officer CASE Category
O G MCGEE	LERC/J M LUCERO 46-Mech Engr
	LERC/A P KURKOV

NAG 3-974 Georgia Institute of Technology 3538
 ACTIVELY CONTROLLED SHAFT SEALS FOR AEROSPACE APPLICATIONS

Period	Obligations
01/05/1989-12/31/1994	FY94: \$0 TOTAL: \$294,443
Prin. Invest.	NASA Tech. Officer CASE Category
R F SALANT	LERC/M P PROCTOR 49-Engr, NEC

NAG 3-1610 Georgia Institute of Technology 3546
 PREMIXED TURBULENT FLAME PROPAGATION IN MICROGRAVITY

Period	Obligations
05/25/1994-05/24/1995	FY94: \$108,004 TOTAL: \$108,004
Prin. Invest.	NASA Tech. Officer CASE Category
S MENON	LERC/H D ROSS 41-Aero Engr

NAG 3-1086 Georgia Institute of Technology 3539
 NOVEL JET NOISE REDUCTION CONCEPTS

Period	Obligations
08/14/1989-09/30/1994	FY94: \$55,000 TOTAL: \$674,936
Prin. Invest.	NASA Tech. Officer CASE Category
K K AHUJA	LERC/E KREJSA 41-Aero Engr
	LERC/J F GROENEWEG

NAG 3-1651 Georgia Institute of Technology 3547
 EVOLUTION OF MICROSTRUCTURAL DISTANCE DISTRIBUTIONS IN
 NORMAL GRAVITY AND MICROGRAVITY

Period	Obligations
07/13/1994-07/12/1995	FY94: \$49,984 TOTAL: \$49,984
Prin. Invest.	NASA Tech. Officer CASE Category
A M GOKHALE	LERC/M D BETHEA 47-Materials Engr

NASA'S UNIVERSITY PROGRAM
GEORGIA (Continued)

NAG 3-1665 Georgia Institute of Technology 3548
 THERMOCHEMISTRY OF SCANDIUM ADSORBATE GENERATION
Period Obligations
 09/12/1994-09/11/1995 FY94: \$16,800 TOTAL: \$16,800
Prin. Invest. NASA Tech. Officer CASE Category
 D N HILL LERC/E G WINTUCKY 47-Materials Engr

NAG 5-1044 Georgia Institute of Technology 3549
 HUMAN COMPUTER INTERACTION IN DISTRIBUTED SUPERVISORY CONTROL TASKS
Period Obligations
 04/15/1988-05/14/1994 FY94: \$0 TOTAL: \$481,173
Prin. Invest. NASA Tech. Officer CASE Category
 C M MITCHELL GSFC/W F TRUSZKOWSKI 22-Computer Science

NAG 5-1490 Georgia Institute of Technology 3550
 INVESTIGATION OF PASSIVE ATMOSPHERIC SOUNDING USING MILLIMETER AND SUBMILLIMETER-WAVELENGTH CHANNEL
Period Obligations
 12/10/1990-12/31/1994 FY94: \$85,000 TOTAL: \$344,963
Prin. Invest. NASA Tech. Officer CASE Category
 A J GASIEWSKI GSFC/R F ADLER 31-Atmos Sci

NAG 5-2187 Georgia Institute of Technology 3551
 NEXT GENERATION METHODS FOR IMAGE DATA COMPRESSION
Period Obligations
 02/04/1993-02/14/1995 FY94: \$74,973 TOTAL: \$149,179
Prin. Invest. NASA Tech. Officer CASE Category
 M J SMITH GSFC/P S YEH 45-Elec Engr

NAG 5-2226 Georgia Institute of Technology 3552
 ADVANCED USER INTERFACES AND INTELLIGENT SYSTEMS FOR DESIGN, OPERATION, AND MAINTENANCE OF . . .
Period Obligations
 03/23/1993-03/31/1995 FY94: \$100,000 TOTAL: \$245,000
Prin. Invest. NASA Tech. Officer CASE Category
 C M MITCHELL GSFC/W J POTTER 22-Computer Science
 GSFC/A T JOHNS

NAG 5-2227 Georgia Institute of Technology 3553
 INTELLIGENT COMMAND AND CONTROL SYSTEMS FOR SATELLITE GROUND OPERATIONS
Period Obligations
 03/12/1993-03/31/1995 FY94: \$63,011 TOTAL: \$137,245
Prin. Invest. NASA Tech. Officer CASE Category
 C M MITCHELL GSFC/A W STOFFEL 22-Computer Science

NAG 8-194 Georgia Institute of Technology 3554
 THE MERCATOR PROJECT-A NON-VISUAL USER INTERFACE FOR COMPUTER WORKSTATION
Period Obligations
 05/01/1991-10/16/1994 FY94: \$0 TOTAL: \$121,423
Prin. Invest. NASA Tech. Officer CASE Category
 W PUTNAM MSFC/ 29-Math/Computer, NEC
 J GOLDTHWAITE MSFC/C E MOORE
 E MYNATT

NAG 8-243 Georgia Institute of Technology 3555
 ELASTIC PLASTIC FRACTURE MECHANICS METHODOLOGY FOR SURFACE CRACKS
Period Obligations
 08/17/1992-02/28/1995 FY94: \$60,151 TOTAL: \$119,682
Prin. Invest. NASA Tech. Officer CASE Category
 H A ERNST MSFC/C D WILSON 47-Materials Engr
 MSFC/R STALLWORTH

NAG 8-921 Georgia Institute of Technology 3556
 THEORY AND COMPUTATION OF OPTIMAL LOW-MEDIUM THRUST ORBIT TRANSFERS
Period Obligations
 07/07/1992-07/06/1995 FY94: \$91,696 TOTAL: \$119,459
Prin. Invest. NASA Tech. Officer CASE Category
 C H CHUENG MSFC/J M HANSON 42-Astro Engr
 MSFC/G A DUKEMAN

NAG 8-1016 Georgia Institute of Technology 3557
 ASSESSMENT OF IMPACT DAMAGE OF COMPOSITE ROCKET MOTOR CASES
Period Obligations
 10/21/1993-02/28/1994 FY94: \$24,986 TOTAL: \$24,986
Prin. Invest. NASA Tech. Officer CASE Category
 H G PARIS MSFC/F E LEDBETTER 47-Materials Engr
 MSFC/A T NETTLES

NAG 9-422 Georgia Institute of Technology 3558
 COGNITIVE ENGINEERING MODELS IN SPACE SYSTEMS
Period Obligations
 06/11/1990-12/31/1993 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
 C M MITCHELL JSC/M RUDISILL 29-Math/Computer, NEC

NAG 9-726 Georgia Institute of Technology 3559
 OPTIMIZATION FUZZY ADAPTIVE CONTROL AND INTELLIGENT AUTONOMOUS SPACE
Period Obligations
 05/11/1994-02/28/1995 FY94: \$75,000 TOTAL: \$75,000
Prin. Invest. NASA Tech. Officer CASE Category
 A O ESOGBUE JSC/J A VILLARREAL 29-Math/Computer, NEC

NAGW 533 Georgia Institute of Technology 3560
 LAB EVAL OF MICROWAVE ALYOPTION TROPERTIES UNDER SIMULATED CONDITIONS FOR PLANETARY ATMOSPHERES
Period Obligations
 02/01/1984-10/31/1994 FY94: \$67,624 TOTAL: \$704,748
Prin. Invest. NASA Tech. Officer CASE Category
 P G STEFFES HQ/J T BERGSTRAHL 31-Atmos Sci
 HQ/W L QUAIDE

NAGW 1001 Georgia Institute of Technology 3561
 LAB INVESTIGATION OF STRATOSPHERIC BROMINE CHEM.
Period Obligations
 01/01/1987-12/31/1994 FY94: \$161,000 TOTAL: \$1,020,493
Prin. Invest. NASA Tech. Officer CASE Category
 P H WINE HQ/M J KURYLO 31-Atmos Sci
 J M NICOVICH HQ/R T WATSON
 A J HYNES

NAGW 2753 Georgia Institute of Technology 3562
 ACOUSTIC CHARGE TRANSPORT IMAGER FOR HIGH DEFINITION TELEVISION APPLICATIONS: PROOF OF CONCEPT DEMO
Period Obligations
 09/27/1991-09/30/1995 FY94: \$596,896 TOTAL: \$3,731,599
Prin. Invest. NASA Tech. Officer CASE Category
 W D HUNT HQ/T BENTSEN 29-Math/Computer, NEC

NAGW 3117 Georgia Institute of Technology 3563
 ANCIENT SULFUR BIOGEOCHEMISTRY
Period Obligations
 06/29/1992-05/31/1994 FY94: \$0 TOTAL: \$156,925
Prin. Invest. NASA Tech. Officer CASE Category
 D E CANFIELD HQ/J D RUMMEL 54-Env Biology

NASA'S UNIVERSITY PROGRAM
GEORGIA (Continued)

NAGW 3181 Georgia Institute of Technology 3564
 NAGW-3181/GEORGIA TECH RESEARCH CORPORATION/ SPECKLE
 IMAGING OF YOUNG PLANETARY SYSTEMS
Period Obligations
 08/28/1992-06/30/1994 FY94: \$0 TOTAL: \$61,557
Prin. Invest. NASA Tech. Officer CASE Category
 J W BELETIC HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3767 Georgia Institute of Technology 3565
 NAGW-3767/GEORGIA INSTIT OF TECHNOLOGY/EXPERIMENTA L
 STUDY OF ATMOSPHERIC HOMOGENEOUS NUCLEATION
Period Obligations
 11/04/1993-05/31/1996 FY94: \$26,887 TOTAL: \$26,887
Prin. Invest. NASA Tech. Officer CASE Category
 F L EISELE HQ/J A KAYE 31-Atmos Sci
 HQ/A C JANETOS

NAGW 3770 Georgia Institute of Technology 3566
 THEORETICAL AND GLOBAL MODEL STUDIES OF THE ATMOSP
 HERIC SULFUR/AEROSOL SYSTEM
Period Obligations
 10/05/1993-05/31/1996 FY94: \$186,140 TOTAL: \$186,140
Prin. Invest. NASA Tech. Officer CASE Category
 P KASIBHATLA HQ/J A KAYE 31-Atmos Sci
 HQ/A C JANETOS

NAGW 3817 Georgia Institute of Technology 3567
 NAGW-3817/B GEORG. TECH RES. CORP. '8TH ANNUAL NAT . CONF
 OF BLACK PHYSICS STUDENTS' 12/15/93 START
Period Obligations
 11/24/1993-12/14/1994 FY94: \$40,754 TOTAL: \$40,754
Prin. Invest. NASA Tech. Officer CASE Category
 H S VALK HQ/D A HOLLAND 13-Physics

NAGW 3886 Georgia Institute of Technology 3568
 PARRELLILIZATION AND VISUAL ANALYSIS OF DYNAMICAL/
 CHEMICAL ATMOSPHERIC MODELS
Period Obligations
 03/09/1994-03/31/1995 FY94: \$120,398 TOTAL: \$120,398
Prin. Invest. NASA Tech. Officer CASE Category
 K SCHWAN HQ/G H MUCKLOW 22-Computer Science
 HQ/J H BREDECAMP

NAS 1-14654 Georgia Institute of Technology 3569
 INVESTIGATION OF THE EFFECTS OF LONG DURATION EXPOSURE
 ON ACTIVE OPTICAL SYSTEM COMPONENTS
Period Obligations
 10/14/1976-09/30/1994 FY94: \$0 TOTAL: \$699,463
Prin. Invest. NASA Tech. Officer CASE Category
 M D BLUE LARC/L G CLARK 45-Elec Engr
 J J GALLAGHER LARC/J D BATTISTA
 R G SHACKELFORD

NAS 1-15370 Georgia Institute of Technology 3570
 HOLOGRAPHIC DATA STORAGE CRYSTALS EXPERIMENT FOR THE
 LONG DURATION EXPOSURE FACILITY (LDEF)
Period Obligations
 04/21/1978-10/01/1992 FY94: \$0 TOTAL: \$66,795
Prin. Invest. NASA Tech. Officer CASE Category
 T K GAYLORD LARC/R L O'NEAL 45-Elec Engr
 W R CALLEN LARC/L G CLARK

NAS 1-18938 Georgia Institute of Technology 3571
 SAGE III EXPERIMENT SCIENTIFIC SUPPORT/CUNNOLD
Period Obligations
 02/20/1990-01/31/1995 FY94: \$45,000 TOTAL: \$104,700
Prin. Invest. NASA Tech. Officer CASE Category
 D M CUNNOLD LARC/G L MADDREA 31-Atmos Sci

NAS 1-19061 Georgia Institute of Technology 3572
 RESEARCH IN ACOUSTICS AND NOISE CONTROL
Period Obligations
 02/02/1990-02/01/1996 FY94: \$435,000 TOTAL: \$3,330,868
Prin. Invest. NASA Tech. Officer CASE Category
 K AHUJA LARC/L R CLARK 41-Aero Engr

NAS 1-19954 Georgia Institute of Technology 3573
 SAGE II SCIENTIFIC INVESTIGATION
Period Obligations
 05/05/1993-05/04/1996 FY94: \$80,000 TOTAL: \$165,000
Prin. Invest. NASA Tech. Officer CASE Category
 D M CUNNOLD LARC/G L MADDREA 31-Atmos Sci
 LARC/M D MCCORMICK

NAS 3-27361 Georgia Institute of Technology 3574
 RF PROPAGATION EFFECTS
Period Obligations
 08/10/1994-03/26/1996 FY94: \$129,834 TOTAL: \$129,834
Prin. Invest. NASA Tech. Officer CASE Category
 D HOWARD LERC/R BAUER 99-Multi-Discip
 P STEFFES

NAS 5-27264 Georgia Institute of Technology 3575
 PARTICIPATION IN UARS SCIENCE WORKING GROUP MEETINGS
 ON THEORETICAL INVESTIGATIONS
Period Obligations
 07/01/1982-09/30/1995 FY94: \$158,000 TOTAL: \$1,481,961
Prin. Invest. NASA Tech. Officer CASE Category
 D CUNNOLD GSFC/C REBER 31-Atmos Sci

NCA 2-512 Georgia Institute of Technology 3576
 IMPACT OF ROTATING FRAME ON HELICOPTER FLIGHT DYNAMICS
Period Obligations
 04/23/1990-12/31/1992 FY94: \$0 TOTAL: \$79,870
Prin. Invest. NASA Tech. Officer CASE Category
 J V PRASAD ARC/A ATENCIO 41-Aero Engr
 D P SCHRAGE ARC/R E MCFARLAND

NCA 2-747 Georgia Institute of Technology 3577
 STUDIES OF HIGH LIFT AIRFOIL WITH IMPROVING STALL
 CHARACTERISTICS
Period Obligations
 08/25/1992-12/31/1994 FY94: \$0 TOTAL: \$70,559
Prin. Invest. NASA Tech. Officer CASE Category
 J C WU ARC/C TUNG 41-Aero Engr
 C M WANG

NCA 2-761 Georgia Institute of Technology 3578
 ROTORCRAFT TURBULENCE MODELING AND SIMULATION
Period Obligations
 11/12/1992-08/31/1993 FY94: \$0 TOTAL: \$26,030
Prin. Invest. NASA Tech. Officer CASE Category
 J V PRASAD ARC/A ATENCIO 41-Aero Engr
 ARC/R E MCFARLAND

**NASA'S UNIVERSITY PROGRAM
GEORGIA (Continued)**

NCA 2-771 Georgia Institute of Technology 3579
A MULTIDISCIPLINARY DESIGN OPTIMIZATION METHOD APP LIED
TO STOPPABLE CONFIGURATIONS
Period *Obligations*
02/01/1993-09/30/1994 FY94: \$0 TOTAL: \$39,990
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D P SCHRAGE ARC/T GALLOWAY 41-Aero Engr
D MAVRIS

NCC 1-148 Georgia Institute of Technology 3580
THE NASA GLOBAL TROPOSPHERIC EXPERIMENT; PACIFIC
EXPLORATORY MISSION WEST (PEM WEST) MISSION SCIENT
Period *Obligations*
01/07/1991-04/30/1994 FY94: \$0 TOTAL: \$152,614
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D D DAVIS LARC/J M HOELL 31-Atmos Sci
LARC/R J BENDURA

NCC 2-675 Georgia Institute of Technology 3581
OPERATOR MODELING IN COMMERCIAL AVIATION: COGNIT IVE
MODELS, INTELLIGENT DISPLAYS, AND PILOT'S
Period *Obligations*
07/26/1990-06/30/1993 FY94: \$0 TOTAL: \$344,563
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T GOVINDARAJ ARC/E A PALMER 49-Engr, NEC
C M MITCHELL ARC/S L CHAPPELL

NCC 2-824 Georgia Institute of Technology 3582
HUMAN-CENTERED DESIGN OF HUMAN-COMPUTER-HUMAN DIAL
OGS IN AEROSPACE SYSTEMS
Period *Obligations*
09/07/1993-04/30/1995 FY94: \$78,598 TOTAL: \$180,077
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C M MITCHELL ARC/E A PALMER 49-Engr, NEC
ARC/K CORKER

NCC 3-302 Georgia Institute of Technology 3583
FREQUENCY RESPONSE OF A THERMOCOUPLE: EFFECTS OF F
LOW REVERSAL
Period *Obligations*
03/24/1993-10/31/1994 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L J FORNEY LERC/G C FRALICK 46-Mech Engr

NGT 00-010-007 Georgia Institute of Technology 3584
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP P
ROGRAM
Period *Obligations*
10/22/1993-06/30/1994 FY94: \$49,922 TOTAL: \$49,922
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D P SCHRAGE HQ/G S SEIDEL 41-Aero Engr
J I CRAIG HQ/J R FACEY

NGT 00-040-013 Georgia Institute of Technology 3585
NATION SPACE GRANT AND FELLOWSHIP PROGRAM
Period *Obligations*
09/29/1989-01/31/1995 FY94: \$355,000 TOTAL: \$1,673,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A PETERS HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-641 Georgia Institute of Technology 3586
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/06/1990-06/30/1994 FY94: \$0 TOTAL: \$88,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H A EMST HQ/F C OWENS 46-Mech Engr

NGT 00-050-705 Georgia Institute of Technology 3587
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/13/1991-10/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D MUZZY HQ/F C OWENS 47-Materials Engr

NGT 00-050-765 Georgia Institute of Technology 3588
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/10/1991-06/30/1994 FY94: \$0 TOTAL: \$60,448
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W L CHAMEIDES HQ/F C OWENS 11-Astronomy

NGT 00-050-864 Georgia Institute of Technology 3589
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
11/08/1991-08/31/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G ROPER MSFC/F SIX 31-Atmos Sci

NGT 00-050-903 Georgia Institute of Technology 3590
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/26/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A J GASIEWSKI HQ/J ALEXANDER 45-Elec Engr

NGT 00-050-981 Georgia Institute of Technology 3591
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/20/1992-09/20/1994 FY94: \$0 TOTAL: \$18,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M P KAMAT LERC/F MONTEGANI 42-Astro Engr

NGT 00-051-042 Georgia Institute of Technology 3592
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/06/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W T RHODES MSFC/F SIX 45-Elec Engr

NGT 00-051-088 Georgia Institute of Technology 3593
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/14/1993-06/30/1996 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G P NEITZEL HQ/D A HOLLAND 46-Mech Engr

NGT 00-051-101 Georgia Institute of Technology 3594
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/25/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D SCHRAGE HQ/J T LYNCH 41-Aero Engr

NGT 00-051-102 Georgia Institute of Technology 3595
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/25/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
KEMPER HQ/J T LYNCH 46-Mech Engr

NASA'S UNIVERSITY PROGRAM
GEORGIA (Continued)

NGT 00-051-112 Georgia Institute of Technology 3596
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/22/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 A SAXENA LARC/E PRIOR 47-Materials Engr

NGT 00-051-115 Georgia Institute of Technology 3597
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/23/1993-09/14/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 K A CUNEFARE HQ/F T LYNCH 46-Mech Engr

NGT 00-051-154 Georgia Institute of Technology 3598
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/04/1993-09/14/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 K SCHWAN HQ/D HOLLAND 22-Computer Science

NGT 00-051-178 Georgia Institute of Technology 3599
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/18/1993-09/14/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 D L MCDOWELL LERC/F MONTEGANI 46-Mech Engr

NGT 00-051-192 Georgia Institute of Technology 3600
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/29/1993-08/31/1996 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 D N HILL LERC/F MONTEGANI 47-Materials Engr

NGT 00-051-250 Georgia Institute of Technology 3601
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 J I CRAIG HQ/P SMITH 22-Computer Science

NGT 00-051-266 Georgia Institute of Technology 3602
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/26/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 G P NEITZEL HQ/G LESANE 46-Mech Engr

NGT 00-051-346 Georgia Institute of Technology 3603
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/22/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 M K SMITH HQ/G A LESANE 46-Mech Engr

NGT 00-070-254 Georgia Institute of Technology 3604
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 05/11/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 W J WEPFER HQ/D K RUSSELL 46-Mech Engr

NGT 00-070-315 Georgia Institute of Technology 3605
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 06/29/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 H STALFORD HQ/D K RUSSELL 41-Aero Engr

NGT 00-070-356 Georgia Institute of Technology 3606
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 08/31/1993-07/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 R GERHARDT HQ/D K RUSSELL 45-Elec Engr

NGT 00-070-363 Georgia Institute of Technology 3607
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 09/08/1993-08/31/1994 FY94: \$0 TOTAL: \$21,934
Prin. Invest. NASA Tech. Officer CASE Category
 P GIRARD HQ/D K RUSSELL 51-Biological Sci

NGT 00-070-383 Georgia Institute of Technology 3608
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 09/29/1994-06/30/1997 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 M LIU HQ/D K RUSSELL 99-Multi-Discip
 A S ABHIRAMAN

NGT 00-090-080 Georgia Institute of Technology 3609
 GSRP/UMF
Period Obligations
 09/16/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. NASA Tech. Officer CASE Category
 L R HOWARD HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-081 Georgia Institute of Technology 3610
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
 09/17/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
 L R HOWARD HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-082 Georgia Institute of Technology 3611
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/12/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. NASA Tech. Officer CASE Category
 L R HOWARD HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-167 Georgia Institute of Technology 3612
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/29/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
 L HOWARD HQ/D K RUSSELL 99-Multi-Discip

**NASA'S UNIVERSITY PROGRAM
GEORGIA (Continued)**

NGT 00-090-199 Georgia Institute of Technology 3613
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
L HOWARD HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-200 Georgia Institute of Technology 3614
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period Obligations
08/25/1993-08/14/1995 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
L HOWARD HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-201 Georgia Institute of Technology 3615
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/25/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
L HOWARD HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-202 Georgia Institute of Technology 3616
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
L HOWARD HQ/D K RUSSELL 99-Multi-Discip

NAG 5-496 Georgia Southern College 3617
LABORATORY STUDIES OF SMALL CARBON GRANULES
Period Obligations
02/01/1985-03/31/1995 FY94: \$20,007 TOTAL: \$165,820
Prin. Invest. NASA Tech. Officer CASE Category
R H NELSON GSFC/B DONN 12-Chemistry
GSFC/J A NUTH

NAG 8-271 Georgia Southwestern College 3618
JOVE
Period Obligations
12/30/1992-12/31/1994 FY94: \$0 TOTAL: \$55,000
Prin. Invest. NASA Tech. Officer CASE Category
J P MANKER MSFC/F SIX 99-Multi-Discip
E D ELDER

NAG 2-438 Georgia State University 3619
SELECTION OF BEHAVIORAL TASKS AND DEVELOPMENT OF SWARE
FOR EVALUATION OF RHESUS MONKEY BEHAVIOR DURI
Period Obligations
03/01/1987-02/28/1995 FY94: \$299,002 TOTAL: \$1,292,645
Prin. Invest. NASA Tech. Officer CASE Category
D M RUMBAUGH ARC/P X CALLAHAN 51-Biological Sci
E S SAVAGE ARC/C M WINGET
W K RICHARDSON

NAG 5-1994 Georgia State University 3620
TOMOGRAPHY OF EARLY-TYPE CLOSE BINARY STARS
Period Obligations
06/12/1992-06/14/1994 FY94: \$0 TOTAL: \$92,953
Prin. Invest. NASA Tech. Officer CASE Category
W BAGNUOLO GSFC/D WEST 11-Astronomy

NAG 5-2148 Georgia State University 3621
COLLIDING WINDS AND TOMOGRAPHY OF O-TYPE BINARIES
Period Obligations
12/14/1992-03/31/1995 FY94: \$12,060 TOTAL: \$18,000
Prin. Invest. NASA Tech. Officer CASE Category
GIES GSFC/D WEST 11-Astronomy

NAG 5-2488 Georgia State University 3622
TOMOGRAPHY AND COLLIDING WINDS OF O-TYPE BINARIES
Period Obligations
02/02/1994-02/14/1995 FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. NASA Tech. Officer CASE Category
W G BAGNUOLO GSFC/D WEST 11-Astronomy

NAG 9-645 Mercer University Central Office 3623
INVESTIGATION USE OF CURRENT CONVEYOR AMPLIFIERS I N
DESIGN/BIOMEDICAL SIGNAL CONDITIONERS
Period Obligations
09/22/1992-11/01/1994 FY94: \$0 TOTAL: \$24,999
Prin. Invest. NASA Tech. Officer CASE Category
E M O'BRIEN JSC/D STILWELL 45-Elec Engr

NGT 00-090-025 Morehouse College 3624
PROJECT SPACE STRATEGIC PREPAREDNESS ADVANCING
CAREER
Period Obligations
03/08/1989-05/31/1995 FY94: \$2,337,264 TOTAL: \$5,906,707
Prin. Invest. NASA Tech. Officer CASE Category
W JACKSON LARC/B PETERS 49-Engr, NEC
M W GREENE HQ/Y FREEMAN

NAG 9-547 Morehouse School Med 3625
PROSPECTIVE RISK ASSESSMENT MODEL FOR USE IN EXTEN DED
SPACE FLIGHT
Period Obligations
10/15/1991-01/01/1995 FY94: \$100,000 TOTAL: \$330,000
Prin. Invest. NASA Tech. Officer CASE Category
W SULLIVAN JSC/R BILLICA 56-Medical Sciences

NAG 9-644 Morehouse School Med 3626
CELLULAR RESPONSE TO HYPOGRAVITY AND HYPERGRAVITY ST
RESS
Period Obligations
09/22/1992-10/01/1995 FY94: \$125,000 TOTAL: \$446,000
Prin. Invest. NASA Tech. Officer CASE Category
G L SANFORD JSC/C SAMS 56-Medical Sciences

NGT 00-090-003 Spelman College 3627
GRADUATE STUDENT RESEARCHERS
Period Obligations
12/01/1986-12/31/1994 FY94: \$1,383,064 TOTAL: \$6,851,770
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/B WHITE 45-Elec Engr

NGT 00-090-049 Spelman College 3628
UNDERGRADUATE STUDENT RESEARCHERS PRG
Period Obligations
08/22/1991-08/31/1994 FY94: \$0 TOTAL: \$464,707
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/B WHITE 49-Engr, NEC

**NASA'S UNIVERSITY PROGRAM
GEORGIA (Continued)**

NGT 00-090-072 Spelman College 3629
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/22/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-185 Spelman College 3638
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/07/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-089 Spelman College 3630
GSRP
Period Obligations
09/23/1992-04/25/1994 FY94: \$5,031 TOTAL: \$17,031
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-186 Spelman College 3639
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-090 Spelman College 3631
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-187 Spelman College 3640
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-091 Spelman College 3632
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/23/1992-08/14/1993 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NAG 5-1608 University of Georgia 3641
A DEEP X-RAY SURVEY OF THE PLEIADES CLUSTER; THE B6 -A3
MAIN SEQUENCE STARS IN ORION
Period Obligations
05/24/1991-06/14/1993 FY94: \$0 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
J P CAILLAULT GSFC/ 11-Astronomy
GSFC/R PETRE

NGT 00-090-092 Spelman College 3633
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/24/1992-08/31/1993 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NAG 5-1610 University of Georgia 3642
HIGH-RESOLUTION X-RAY OBSERVATIONS OF THE TRAPEZIU M
CLUSTER
Period Obligations
10/15/1991-04/14/1996 FY94: \$29,600 TOTAL: \$86,017
Prin. Invest. NASA Tech. Officer CASE Category
J P CAILLAULT GSFC/R PETRE 11-Astronomy

NGT 00-090-093 Spelman College 3634
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/17/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NAG 5-2095 University of Georgia 3643
NEAR-CONTACT BINARY STARS
Period Obligations
09/15/1992-09/14/1995 FY94: \$0 TOTAL: \$18,000
Prin. Invest. NASA Tech. Officer CASE Category
J S SHAW GSFC/R PETRE 11-Astronomy

NGT 00-090-094 Spelman College 3635
GSRP/UMF
Period Obligations
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NAG 5-2409 University of Georgia 3644
THE N(H2) - INFRARED CALIBRATION IN MOLECULAR CLOUDS
Period Obligations
11/09/1993-11/14/1995 FY94: \$28,500 TOTAL: \$28,500
Prin. Invest. NASA Tech. Officer CASE Category
L MAGNANI GSFC/D WEST 11-Astronomy

NGT 00-090-095 Spelman College 3636
GSRP
Period Obligations
09/23/1992-08/14/1993 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NAG 5-2665 University of Georgia 3645
AN X-RAY SEARCH FOR PMS STARS IN HIGH LATITUDE MOLECULAR
CLOUDS
Period Obligations
07/29/1994-07/31/1995 FY94: \$44,999 TOTAL: \$44,999
Prin. Invest. NASA Tech. Officer CASE Category
L MAGNANI D WEST 11-Astronomy

NGT 00-090-096 Spelman College 3637
GSRP/UMF
Period Obligations
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
E FALCONER HQ/D RUSSELL 99-Multi-Discip

NASA'S UNIVERSITY PROGRAM
HAWAII (Continued)

NAG 5-1839 University of Hawaii - Manoa 3662
 THE ATMOSPHERIC IMPACT OF ERUPTIONS: INVESTIGATION NS OF
 SOURCE FUNCTIONS, PLUME DISSIPATION
Period Obligations
 12/02/1991-12/31/1994 FY94: \$67,000 TOTAL: \$218,000
Prin. Invest. NASA Tech. Officer CASE Category
 S SELF GSFC/L S WALTER 31-Atmos Sci
 M R RAMPINO

NAG 5-1880 University of Hawaii - Manoa 3663
 PSPC OBS. OF 12 EMSS UNIDENTIFIED SOURCES: VERY D ISTANT
 CLUSTERS OF GALAXIES OR UNUSUAL X-RAY EMIT
Period Obligations
 02/10/1992-08/14/1995 FY94: \$40,000 TOTAL: \$57,000
Prin. Invest. NASA Tech. Officer CASE Category
 J P HENRY GSFC/R PETRE 11-Astronomy

NAG 5-1928 University of Hawaii - Manoa 3664
 ROSAT OBSERVATIONS OF GALAXY POPULATIONS IN THE HA WAI
 DEEP NEAR-INFRARED SURVEY
Period Obligations
 03/03/1992-03/14/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 L L COWIE GSFC/R PETRE 11-Astronomy

NAG 5-1996 University of Hawaii - Manoa 3665
 X-RAY EVOLUTION OF CLUSTERS OF GALAXIES
Period Obligations
 06/12/1992-06/14/1994 FY94: \$0 TOTAL: \$32,707
Prin. Invest. NASA Tech. Officer CASE Category
 J P HENRY GSFC/D WEST 11-Astronomy

NAG 5-2022 University of Hawaii - Manoa 3666
 THE ONSET OF CORONAL ACTIVITY
Period Obligations
 07/15/1992-01/14/1996 FY94: \$51,614 TOTAL: \$89,791
Prin. Invest. NASA Tech. Officer CASE Category
 T SIMON GSFC/R PETRE 11-Astronomy

NAG 5-2132 University of Hawaii - Manoa 3667
 MINKOWSKI'S OBJECT
Period Obligations
 11/09/1992-11/14/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
 K C CHAMBERS GSFC/R PETRE 11-Astronomy

NAG 5-2150 University of Hawaii - Manoa 3668
 1) CONVECTION, GRANULATION, AND THERMAL BIFURCATIO N IN
 THE A STARS 2) ACTIVITY CYCLE OF THE HERBIG.
Period Obligations
 12/14/1992-01/31/1994 FY94: \$42,590 TOTAL: \$63,500
Prin. Invest. NASA Tech. Officer CASE Category
 T SIMON GSFC/D WEST 11-Astronomy

NAG 5-2275 University of Hawaii - Manoa 3669
 EUVE OBSERVATIONS OF THE DME FLARE STAR AD LEO
Period Obligations
 05/26/1993-11/30/1995 FY94: \$10,000 TOTAL: \$46,000
Prin. Invest. NASA Tech. Officer CASE Category
 T SIMON GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2486 University of Hawaii - Manoa 3670
 PARALLEL IMAGE COMPRESSION BY NEURAL NETWORKS
Period Obligations
 02/04/1994-02/14/1995 FY94: \$29,974 TOTAL: \$29,974
Prin. Invest. NASA Tech. Officer CASE Category
 D Y YUN GSFC/J R FISCHER 22-Computer Science

NAG 5-2523 University of Hawaii - Manoa 3671
 X-RAY TEMPERATURE FOR A COMPLETE SAMPLE OF DISTANT
 CLUSTERS
Period Obligations
 02/24/1994-09/14/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 J P HENRY GSFC/N WHITE 11-Astronomy

NAG 5-2594 University of Hawaii - Manoa 3672
 HRI OBSERVATIONS OF MS0440.5+0204: A LUMINOUS X-R AY
 CLUSTER WITH A COMPLEX ARC SYSTEM
Period Obligations
 05/10/1994-05/14/1995 FY94: \$30,908 TOTAL: \$30,908
Prin. Invest. NASA Tech. Officer CASE Category
 I GIOIA GSFC/R PETRE 11-Astronomy

NAG 5-2613 University of Hawaii - Manoa 3673
 HIGH-SPEED SOFT-DECISION DECODING OF TWO REED-MULL ER
 CODES
Period Obligations
 06/14/1994-06/14/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 S LIN GSFC/W H MILLER 49-Engr, NEC
 G UEHARA GSFC/J C MORAKIS

NAG 5-2631 University of Hawaii - Manoa 3674
 HELIUM AND NEON IN COMETS
Period Obligations
 06/28/1994-06/30/1995 FY94: \$47,041 TOTAL: \$47,041
Prin. Invest. NASA Tech. Officer CASE Category
 D C JEWITT GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2663 University of Hawaii - Manoa 3675
 PARTICIPATION IN THE CONSOLIDATED INFRARED SPEC-
 TROMETER (CIRS) AS CO-INVESTIGATOR
Period Obligations
 07/21/1994-07/31/1995 FY94: \$7,113 TOTAL: \$7,113
Prin. Invest. NASA Tech. Officer CASE Category
 T OWEN GSFC/V KUNDE 11-Astronomy

NAG 5-2675 University of Hawaii - Manoa 3676
 IRAS (HIRES) STUDIES OF HIGH MASS STAR FORMATION
Period Obligations
 08/11/1994-08/14/1995 FY94: \$42,900 TOTAL: \$42,900
Prin. Invest. NASA Tech. Officer CASE Category
 C WYNN-WILLIAMS GSFC/D WEST 11-Astronomy

NAG 5-2695 University of Hawaii - Manoa 3677
 NASA DIGITAL IMAGE DATA DISTRIBUTION FOR EDUCATION PUBLIC
 ACCESS AND TOURISM IN HAWAII: A MODEL SYS.
Period Obligations
 08/17/1994-08/31/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
 P J MOUGINIS-MARK GSFC/F HASLER 39-Env Sci, NEC

**NASA'S UNIVERSITY PROGRAM
HAWAII (Continued)**

NAG 8-848 University of Hawaii - Manoa 3678
STUDY OF AEROSOL IN THE ATMOSPHERE
Period Obligations
08/30/1990-04/30/1993 FY94: TOTAL: \$170,498
Prin. Invest. NASA Tech. Officer CASE Category
A D CLARKE MSFC/J ROTHERMEL 31-Atmos Sci

NAG 8-994 University of Hawaii - Manoa 3679
JOVE
Period Obligations
01/25/1994-05/31/1995 FY94: \$34,813 TOTAL: \$34,813
Prin. Invest. NASA Tech. Officer CASE Category
W D HEACOX MSFC/F SIX 11-Astronomy

NAG 9-454 University of Hawaii - Manoa 3680
ORIGIN OF METEORITE PARENT BODIES AND THE MOON
Period Obligations
07/01/1990-03/01/1993 FY94: \$0 TOTAL: \$875,743
Prin. Invest. NASA Tech. Officer CASE Category
K KEIL JSC/I D BROWNE 19-Phys Sci, NEC

NAGW 237 University of Hawaii - Manoa 3681
GEOLOGIC STUDIES OF PLANETARY VOLCANIC AND IMPACT PROCESS.
Period Obligations
08/01/1981-10/31/1996 FY94: \$72,000 TOTAL: \$776,915
Prin. Invest. NASA Tech. Officer CASE Category
B R HAWKE HQ/J UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 437 University of Hawaii - Manoa 3682
ANAL OF MARTIAN SURF MATERIALS USING RADAR THEMALA AND COLOR DATA AND GEOL EVOL OF THE HEAVILY CRATERED
Period Obligations
03/01/1983-10/31/1994 FY94: \$144,000 TOTAL: \$985,775
Prin. Invest. NASA Tech. Officer CASE Category
P M MARK HQ/J R UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 583 University of Hawaii - Manoa 3683
VOLATILE MIGRATION AND PHASE CHANGES ON MARS.
Period Obligations
02/01/1984-09/30/1994 FY94: \$0 TOTAL: \$530,599
Prin. Invest. NASA Tech. Officer CASE Category
F P FANALE HQ/J UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 712 University of Hawaii - Manoa 3684
SPECTRAL STUDIES OF POSSIBLE ASTEROID MATERIALS
Period Obligations
01/01/1985-10/31/1994 FY94: \$45,000 TOTAL: \$338,200
Prin. Invest. NASA Tech. Officer CASE Category
J F BELL HQ/J UNDERWOOD JR 32-Geological Sci
HQ/J M BOYCE

NAGW 755 University of Hawaii - Manoa 3685
CHARACTERIZATION OF INFRARED DETECTOR ARRAYS
Period Obligations
06/15/1985-11/30/1994 FY94: \$0 TOTAL: \$2,245,890
Prin. Invest. NASA Tech. Officer CASE Category
D N HALL HQ/R V STACHNIK 13-Physics
HQ/E J WEILER

NAGW 802 University of Hawaii - Manoa 3686
INFRARED SPECTRAL STUDIES OF ASTEROIDS
Period Obligations
09/01/1985-12/31/1997 FY94: \$47,000 TOTAL: \$351,405
Prin. Invest. NASA Tech. Officer CASE Category
W J BELL HQ/H C BRINTON 11-Astronomy
HQ/J H RAHE

NAGW 864 University of Hawaii - Manoa 3687
RADIATING SOLAR PLASMA
Period Obligations
02/01/1986-07/31/1993 FY94: \$0 TOTAL: \$881,700
Prin. Invest. NASA Tech. Officer CASE Category
A N MCCLYMONT HQ/J D BOHLIN 13-Physics
G FISHER HQ/S KANE

NAGW 959 University of Hawaii - Manoa 3688
INTERSTELLAR AND INTERGALLACTIC CGAS
Period Obligations
07/01/1986-09/30/1994 FY94: \$26,000 TOTAL: \$326,016
Prin. Invest. NASA Tech. Officer CASE Category
L L COWIE HQ/F C GILLET 11-Astronomy
HQ/N BOGGESS

NAGW 1053 University of Hawaii - Manoa 3689
REGIONAL PLANETARY IMAGE CENTER
Period Obligations
11/15/1986-11/14/1994 FY94: \$40,000 TOTAL: \$262,514
Prin. Invest. NASA Tech. Officer CASE Category
B R HAWKE HQ/T A MAXWELL 32-Geological Sci

NAGW 1162 University of Hawaii - Manoa 3690
TESTING A MODEL FOR THE MORPHOLOGICAL EVOLUTION OF VOLCANOES
Period Obligations
09/09/1987-08/31/1994 FY94: \$75,000 TOTAL: \$546,946
Prin. Invest. NASA Tech. Officer CASE Category
P J MARK HQ/M BALTUCK 32-Geological Sci
HQ/R E MURPHY

NAGW 1421 University of Hawaii - Manoa 3691
MINERALOGICAL MAPPING OF THE LUNAR SURFACE
Period Obligations
08/09/1988-09/30/1994 FY94: \$38,000 TOTAL: \$220,328
Prin. Invest. NASA Tech. Officer CASE Category
P G LUCEY HQ/T A MAXWELL 32-Geological Sci

NAGW 1454 University of Hawaii - Manoa 3692
SOLAR IMAGING VECTOR MAGNETOGRAPH
Period Obligations
09/08/1988-07/31/1993 FY94: \$0 TOTAL: \$358,501
Prin. Invest. NASA Tech. Officer CASE Category
R C CANFIELD HQ/J D BOHLIN 13-Physics
HQ/S KANE

NAGW 1542 University of Hawaii - Manoa 3693
RESEARCH IN CORONAL AND CHROMOSPHERIC PHYSICS IN SUPPORT
Period Obligations
12/09/1988-10/31/1994 FY94: \$340,000 TOTAL: \$1,976,093
Prin. Invest. NASA Tech. Officer CASE Category
R C CANFIELD HQ/J D BOHLIN 13-Physics
HQ/S KANE

NASA'S UNIVERSITY PROGRAM HAWAII (Continued)

NAGW 1699	University of Hawaii - Manoa	3694
LINEMAN-ALPHA TUNABLE ACOUSTO-OPTIC FILTER		
<i>Period</i>	<i>Obligations</i>	
02/27/1989-10/31/1994	FY94: \$0	TOTAL: \$180,640
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D L MICKEY	HQ/W N WAGNER	13-Physics
	HQ/S KANE	

NAGW 1897		University of Hawaii - Manoa	3695
OBSERVATIONAL EVIDENCE OF AGING PROCESSES IN COMET S			
<i>Period</i>		<i>Obligations</i>	
04/06/1990-12/31/1994	FY94: \$48,477		TOTAL: \$303,526
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>		<i>CASE Category</i>
K J MEECH	HQ/J RAHE		11-Astronomy

NAGW 1916	University of Hawaii - Manoa	3696
OPERATION OF THE UNIVERSITY OF HAWAII TELESCOPE AT MAUNA KEA OBSERVATORY		
<i>Period</i>	<i>Obligations</i>	
04/10/1990-10/31/1993	FY94: \$0	TOTAL: \$1,065,661
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D B HALL	HQ/H C BRINTON	11-Astronomy

NAGW 1929		University of Hawaii - Manoa	3697
NAGW-1929/UNIV OF HAWAII/LANDSAT THEMATIC MAPPER			
STUDIES OF ANDEAN VOLCANOES			
<i>Period</i>		<i>Obligations</i>	
01/26/1990-01/31/1994	FY94: \$0		TOTAL: \$178,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>		<i>CASE Category</i>
S SELF	HQ/M BALTUCK		32-Geological Sci
	HQ/T J PIEPER		

NAGW 1991		University of Hawaii - Manoa	3698
STUDY OF TRITON AND THE PLUTO-CHARON SYSTEM			
<i>Period</i>		<i>Obligations</i>	
02/14/1990-10/31/1994	FY94: \$0		TOTAL: \$81,503
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>		<i>CASE Category</i>
D J THOLEN	HQ/J H RAHE		11-Astronomy

NAGW 2153		University of Hawaii - Manoa	3699
OUTER SOLAR SYSTEM NOMENCLATURE			
Period		Obligations	
08/14/1990-02/28/1994	FY94: \$3,115		TOTAL: \$25,802
Prin. Invest.	NASA Tech. Officer		CASE Category
T OWEN	HQ/T A MAXWELL		32-Geological Sci

NAGW 2174	University of Hawaii - Manoa	3700
REMOTE COMPOSITIONAL ANALYSIS OF LUNAR AND PLANETARY SURFACES		
<i>Period</i>	<i>Obligations</i>	
07/23/1990-09/30/1995	FY94: \$0	TOTAL: \$479,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T B MCCORD	HQ/T A MAXWELL	32-Geological Sci

NAGW 2278	University of Hawaii - Manoa	3701
OBSERVATIONAL STUDIES OF COMETS AND THE POTENTIAL SITES OF PLANETARY SYSTEM FORMATION		
<i>Period</i>	<i>Obligations</i>	
05/21/1991-10/31/1993	FY94: \$0	TOTAL: \$165,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A TOKUNAGA	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 2463		University of Hawaii - Manoa	3702
STUDIES IN PLANETARY SCIENCE			
<i>Period</i>	<i>Obligations</i>		
08/27/1991-12/31/1993	FY94: \$0	TOTAL: \$116,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B A SMITH	HQ/L KALUZIENSKI	11-Astronomy	

NAGW 2468	University of Hawaii - Manoa	3703
A GLOBAL ASSESSMENT OF ACTIVE VOLCANISM VOLCANIC HAZARDS, AND VOLCANIC INPUTS TO THE ATMOS. FROM EO		
<i>Period</i>	<i>Obligations</i>	
04/30/1991-12/31/1994	FY94: \$350,000	TOTAL: \$1,015,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P MOUQUINIS-MARK	HQ/M BALTUCK HQ/B J MALCOLM	39-Env Sci, NEC

NAGW 2521	University of Hawaii - Manoa	3704
VOLCANISM IN ALASKA AND ALEUTIANS FROM ERS-1		
<i>Period</i>	<i>Obligations</i>	
07/25/1991-04/30/1994	FY94: \$0	TOTAL: \$85,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P J MOUGINIS-MARK	HQ/R H THOMAS	32-Geological Sci

NAGW 2631		University of Hawaii - Manoa		3705
LABORATORY	INVESTIGATIONS	OF	VOLATILE	TRAPPING IN
COMETS				
<i>Period</i>		<i>Obligations</i>		
09/04/1991-08/31/1994		FY94: \$0	TOTAL: \$215,343	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>			<i>CASE Category</i>
T C OWEN	HQ/J D RUMMEL			12-Chemistry

NAGW 2650	University of Hawaii - Manoa	3706
NAGW-2650/UNIV HAWAII/SPECTROSCOPIC OBSERVATIONS OF THE PLANETS		
<i>Period</i>	<i>Obligations</i>	
08/19/1991-03/31/1995	FY94: \$50,880	TOTAL: \$161,880
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T OWEN	HQ/J RAHE	11-Astronomy

NAGW 2917	University of Hawaii - Manoa	3707
PHYSICAL PROPERTIES OF ACTIVE COMETS		
<i>Period</i>	<i>Obligations</i>	
02/27/1992-02/28/1995	FY94: \$48,000	TOTAL: \$137,270
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D. C. JEWITT	HQ/W L QUAIDE	11-Astronomy

NAGW 2955	University of Hawaii - Manoa	3708
QUANTITATIVE ANALYSIS OF SMALL VOLCANOES ON MARS AND VENUS		
<i>Period</i>	<i>Obligations</i>	
03/03/1992-10/31/1994	FY94: \$35,000	TOTAL: \$105,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P J MARK	HQ/J M BOYCE	32-Geological Sci

NAGW 3015		University of Hawaii - Manoa	3709
PRESENT DAY PLATE MOTIONS AND THE RHEOLOGY OF THE PLATE-MANTLE SYSTEM			
Period		Obligations	
04/03/1992-12/31/1994	Prin. Invest.	FY94: \$66,000 NASA Tech. Officer HQ/R E MURPHY HQ/D M BUTLER	TOTAL: \$192,382 CASE Category 32-Geological Sci
D BERCOVICI			

NASA'S UNIVERSITY PROGRAM

HAWAII (Continued)

NAGW 3044 University of Hawaii - Manoa 3710
 NAGW-3044/UNIV HAWAII/OBSERVATIONS OF SPACECRAFT
 TARGETS, UNUSUAL OBJECTS, AND OTHER TARGETS
Period Obligations
 04/24/1992-03/31/1995 FY94: \$24,000 TOTAL: \$74,000
Prin. Invest. NASA Tech. Officer CASE Category
 D J THOLEN HQ/H C BRINTON 11-Astronomy

NAGW 3093 University of Hawaii - Manoa 3711
 MODELING AND MONITORING OF THE PLUTO/CHARRON SYSTE M
Period Obligations
 01/26/1993-12/31/1994 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
 D J THOLEN HQ/H C BRINTON 11-Astronomy

NAGW 3099 University of Hawaii - Manoa 3712
 NAGW-3099/UNIV HAWAII/INSTRUMENTATION FOR ACHIEVIN G
 HIGH ANGULAR RESOLUTION ON THE NASA INFRARED
Period Obligations
 06/17/1992-02/28/1995 FY94: \$153,958 TOTAL: \$1,192,060
Prin. Invest. NASA Tech. Officer CASE Category
 B SMITH HQ/H C BRINTON 11-Astronomy

NAGW 3218 University of Hawaii - Manoa 3713
 NAGW-3218/UNIV HAWAII/HIGH RESOLUTION STEREO CAMER A
 AND OMEGA IMAGING SPECTROMETER INVESTIGATIONS
Period Obligations
 11/02/1992-06/30/1995 FY94: \$40,000 TOTAL: \$113,000
Prin. Invest. NASA Tech. Officer CASE Category
 T B MCCORD HQ/J M BOYCE 32-Geological Sci

NAGW 3281 University of Hawaii - Manoa 3714
 NAGW-3281/UNIV HAWAII/ORIGIN OF METEOROITE PARENT B ODIES
 AND THE MOON
Period Obligations
 12/04/1992-11/30/1994 FY94: \$310,278 TOTAL: \$608,640
Prin. Invest. NASA Tech. Officer CASE Category
 K KEIL HQ/H C BRINTON 32-Geological Sci

NAGW 3294 University of Hawaii - Manoa 3715
 NAGW-3294/UNIV HAWAII/VOLATILE EVOLUTION
Period Obligations
 11/27/1992-10/31/1994 FY94: \$100,000 TOTAL: \$200,000
Prin. Invest. NASA Tech. Officer CASE Category
 F P FANALE HQ/H C BRINTON 32-Geological Sci

NAGW 3398 University of Hawaii - Manoa 3716
 A DEEP OPTICAL SURVEY OF THE ECLIPTIC
Period Obligations
 03/09/1993-02/28/1994 FY94: \$0 TOTAL: \$34,728
Prin. Invest. NASA Tech. Officer CASE Category
 D JEWITT HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3409 University of Hawaii - Manoa 3717
 THERMAL EMISSION SPECTROSCOPY OF AIRLESS BODIES
Period Obligations
 02/16/1993-02/28/1995 FY94: \$33,096 TOTAL: \$70,336
Prin. Invest. NASA Tech. Officer CASE Category
 P G LUCEY HQ/H C BRINTON 11-Astronomy

NAGW 3427 University of Hawaii - Manoa 3718
 GROUNDBASED TELESCOOPIC OBSERVATIONS IN SUPPORT OF THE
 MARS MISSION
Period Obligations
 02/25/1992-09/30/1994 FY94: \$35,750 TOTAL: \$84,945
Prin. Invest. NASA Tech. Officer CASE Category
 P LUCEY HQ/H C BRINTON 11-Astronomy

NAGW 3493 University of Hawaii - Manoa 3719
 DEV. OF AN OPT. MOD. FOR EST. PRI. PRO. RAT. FROM SEA WL.
 COL. IMA. AND AVHRR CLOUD CLIM.
Period Obligations
 04/02/1992-12/31/1996 FY94: \$79,824 TOTAL: \$93,518
Prin. Invest. NASA Tech. Officer CASE Category
 R BIDIGARE HQ/D E WICKLAND 33-Oceanography
 HQ/A C JANETOS

NAGW 3500 University of Hawaii - Manoa 3720
 EVOLUTION OF VOLCANOES AND THEIR SUMMIT CALEDRAS O N
 VENUS
Period Obligations
 03/31/1993-03/31/1995 FY94: \$21,000 TOTAL: \$51,000
Prin. Invest. NASA Tech. Officer CASE Category
 P J MOUGINIS-MARK HQ/J T BERGSTRALH 32-Geological Sci

NAGW 3531 University of Hawaii - Manoa 3721
 PLAS. DEFOR. OF VENUS LITH. OVER A DYN. MAN. SYN. OF
 SATELLITE DATA ANALYSIS WITH
Period Obligations
 04/22/1993-03/31/1995 FY94: \$0 TOTAL: \$60,306
Prin. Invest. NASA Tech. Officer CASE Category
 D BERCOVICI HQ/J T BERGSTRALH 32-Geological Sci

NAGW 3537 University of Hawaii - Manoa 3722
 LUNAR SCIENCE STRATEGIES AND MGMT OF THE LUNAR EXP
 LORATION SCIENCE WORKING GROUP
Period Obligations
 04/22/1993-09/30/1995 FY94: \$17,924 TOTAL: \$94,697
Prin. Invest. NASA Tech. Officer CASE Category
 G J TAYLOR HQ/C PILCHER 32-Geological Sci

NAGW 3548 University of Hawaii - Manoa 3723
 P-MODE SCATTERING BY SUNSPOTS AND SUBSURFACE MAGNE
 TIC FIELDS
Period Obligations
 04/22/1993-03/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 D BRAUN HQ/W J WAGNER 11-Astronomy
 HQ/J D BOHLIN

NAGW 3643 University of Hawaii - Manoa 3724
 WIDE FIELD IMAGING OF SOLAR SYSTEM OBJECTS WITH AN
 8192X8192 CCD MOSAIC
Period Obligations
 06/25/1993-02/28/1994 FY94: \$0 TOTAL: \$1,243,534
Prin. Invest. NASA Tech. Officer CASE Category
 D HALL HQ/H C BRINTON 11-Astronomy

NAGW 3684 University of Hawaii - Manoa 3725
 LAVA FLOW DYNAMICS
Period Obligations
 08/06/1993-02/29/1996 FY94: \$35,000 TOTAL: \$115,500
Prin. Invest. NASA Tech. Officer CASE Category
 G J TAYLOR HQ/J M BOYCE 32-Geological Sci

NASA'S UNIVERSITY PROGRAM **HAWAII (Continued)**

NAGW 3712 University of Hawaii - Manoa 3726
 PARTICIPATION IN CLEMENTINE SCIENCE TEAM

Period	Obligations	
08/13/1993-06/30/1995	FY94: \$75,000	TOTAL: \$95,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P LUCEY	HQ/H C BRINTON	11-Astronomy

NAGW 3721 University of Hawaii - Manoa 3727
 FORMATION AND HISTORY OF AEROSOLS IN TROPOSPHERIC AND STRATOSPHERIC VOLCANIC ERUPTION CLOUDS

Period	Obligations	
09/10/1993-07/31/1996	FY94: \$75,994	TOTAL: \$133,899
Prin. Invest.	NASA Tech. Officer	CASE Category
S SELF	HQ/M BALTUCK	31-Atmos Sci
	HQ/E PAYLOR	

NAGW 3766 University of Hawaii - Manoa 3728
 REMOTE MARINE AEROSOL: A CHARACTERIZATION OF PHYSICAL CHEMICAL AND OPTICAL PROPERTIES

Period	Obligations	
09/29/1993-11/30/1994	FY94: \$241,313	TOTAL: \$241,313
Prin. Invest.	NASA Tech. Officer	CASE Category
A CLARKE	HQ/J T SUTTLES	31-Atmos Sci
	HQ/A C JANETOS	

NAGW 3812 University of Hawaii - Manoa 3729
 NAGW-3812/UNIV OF HAWAII/REMOTE SENSING DATA TO GIS STUDIES OF LAND USE, LAND COVER AND VEGETATION

Period	Obligations	
11/05/1993-08/14/1994	FY94: \$150,000	TOTAL: \$150,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D M ISHII	HQ/D M BUTLER	39-Env Sci, NEC
P MOUGINIS-MARK	HQ/A J TUYAHOV	
M MC GRANAGHAN		

NAGW 3818 University of Hawaii - Manoa 3730
 NAGW-3818/B UNIV. HAWAII 'PLANETARY SYSTEMS: FORMATION, EVOLUTION AND DETECTION.'

Period	Obligations	
12/23/1993-09/30/1994	FY94: \$50,000	TOTAL: \$50,000
Prin. Invest.	NASA Tech. Officer	CASE Category
B SMITH	HQ/H C BRINTON	11-Astronomy

NAGW 3844 University of Hawaii - Manoa 3731
 EVALUATION OF COMETS AND LINK TO ASTEROIDS

Period	Obligations	
01/06/1994-12/31/1994	FY94: \$20,000	TOTAL: \$20,000
Prin. Invest.	NASA Tech. Officer	CASE Category
K MEECH	HQ/J H RAHE	11-Astronomy

NAGW 3875 University of Hawaii - Manoa 3732
 OPERATION OF THE UNIV OF HAWAII 2.2 METER TELESCOPE AT MAUNA KEA OBS

Period	Obligations	
02/17/1994-04/31/1994	FY94: \$211,200	TOTAL: \$211,200
Prin. Invest.	NASA Tech. Officer	CASE Category
D HALL	HQ/J H RAHE	11-Astronomy

NAGW 3900 University of Hawaii - Manoa 3733
 SUBMILLIMETER IMAGING OF DUST AROUND MAIN SEQUENCE

Period	Obligations	
03/23/1994-04/01/1997	FY94: \$35,000	TOTAL: \$35,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D JEWITT	HQ/J RAHE	11-Astronomy

NAGW 3918 University of Hawaii - Manoa 3734
 NAGW-3918/B UNIV. OF HAWAII 'A SYSTEM FOR ACQ. AND DISSEM. OF EARTH OBS. DATA VIA.' 36 MO MULTI-

Period	Obligations	
04/11/1994-01/14/1995	FY94: \$147,270	TOTAL: \$147,270
Prin. Invest.	NASA Tech. Officer	CASE Category
T N NELSON	HQ/J C DODGE	31-Atmos Sci
	HQ/R A SCHIFFER	

NAGW 3938 University of Hawaii - Manoa 3735
 NAGW-3938/B UNIV. OF HAWAII 'JOINT US/JAPAN OBS. WITH THE INFRARED SPACE.' 12-MONTH AWARD

Period	Obligations	
04/14/1994-01/14/1995	FY94: \$55,000	TOTAL: \$55,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D B SANDERS	HQ/L J CAROFF	11-Astronomy

NAGW 3973 University of Hawaii - Manoa 3736
 SUBMILLIMETER CONTINUUM OBSERVATIONS OF COMETS

Period	Obligations	
05/03/1994-02/28/1997	FY94: \$38,400	TOTAL: \$38,400
Prin. Invest.	NASA Tech. Officer	CASE Category
D JEWITT	HQ/J H RAHE	11-Astronomy

NAGW 4116 University of Hawaii - Manoa 3737
 AVALANCHE MODELS OF SOLAR FLARES

Period	Obligations	
08/15/1994-06/30/1995	FY94: \$60,000	TOTAL: \$60,000
Prin. Invest.	NASA Tech. Officer	CASE Category
B LABONTE	HQ/W J WAGNER	13-Physics
	HQ/J D BOHLIN	

NAS 2-13808 University of Hawaii - Manoa 3738
 CONNECTIVITY SERVICES BETWEEN SCIENCE COMMUNITY AND THE US PACIFIC RIM NATIONS THROUGH PACOM CENTER

Period	Obligations	
02/26/1993-07/31/1993	FY94: \$0	TOTAL: \$245,000
Prin. Invest.	NASA Tech. Officer	CASE Category
T N NEILSON	ARC/M MEDIN	22-Computer Science
	ARC/M LEON	

NAS 2-13894 University of Hawaii - Manoa 3739
 CONNECTIVITY SERV BTWN SCIENCE COMMUNITIES AT NASA AND PACIFIC RIM NATIONS THRU PACCOM CONSORTIUM

Period	Obligations	
08/01/1993-12/15/1993	FY94: \$21,434	TOTAL: \$249,964
Prin. Invest.	NASA Tech. Officer	CASE Category
T N NELSON	ARC/M NELSON	22-Computer Science
	ARC/M LEON	

NAS 2-14059 University of Hawaii - Manoa 3740
 CONNECTIVITY SERVICE BETWEEN SCIENCE COMMUNITIES AT NASA AND PACIFIC RIM NATIONS THRU PACCOM CONSOR

Period	Obligations	
05/10/1994-03/31/1996	FY94: \$690,200	TOTAL: \$690,200
Prin. Invest.	NASA Tech. Officer	CASE Category
T N NEILSON	ARC/M MODIN	22-Computer Science
	ARC/M LEON	

NAS 5-30535 University of Hawaii - Manoa 3741
 LASER RANGING OPERATIONS AND DEVELOPMENT AT LURE OBSERVATORY

Period	Obligations	
02/01/1989-01/31/1994	FY94: \$153,515	TOTAL: \$3,160,515
Prin. Invest.	NASA Tech. Officer	CASE Category
L MACKNIK	GSFC/J F MCGARRY	11-Astronomy
L S MACKNIK		

NASA'S UNIVERSITY PROGRAM
HAWAII (Continued)

NAS 5-30951 University of Hawaii - Manoa 3742
 INTERPRETATION OF GALILEO PROBE MASS SPECTROMETER DATA

Period	Obligations	
01/15/1991-01/14/1995	FY94: \$100,000	TOTAL: \$136,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T B OWEN	GSFC/J R RICHARDS	31-Atmos Sci

NGT 00-030-137 University of Hawaii - Manoa 3750
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
11/02/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R E HOLASEK	HQ/G ASRAR	32-Geological Sci
	HQ/D M BUTLER	

NAS 5-31722 University of Hawaii - Manoa 3743
 EOS INVESTIGATION 'GLOBAL HYDROLOGIC PROCESSES AND CLIMATE'

Period	Obligations	
10/08/1991-10/07/1996	FY94: \$45,000	TOTAL: \$152,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R LUKAS	GSFC/W LAU	39-Env Sci, NEC

NGT 00-040-020 University of Hawaii - Manoa 3751
 NGT-40020/UNIV OF HAWAII/NAT'L SPACE GRANT COLLGE AND FELLOWSHIP PROGRAM

Period	Obligations	
03/07/1990-01/31/1995	FY94: \$330,000	TOTAL: \$1,493,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P MOUGINIS-MARK	HQ/E T SCHWARTZ	99-Multi-Discip

NAS 5-32354 University of Hawaii - Manoa 3744
 LASER RANGING OPERATIONS AND MAINTENANCE

Period	Obligations	
03/03/1994-03/02/1999	FY94: \$500,216	TOTAL: \$500,216
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D HALL	GSFC/J MCGARRY	99-Multi-Discip

NGT 00-050-811 University of Hawaii - Manoa 3752
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/01/1991-07/31/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J P HENRY	HQ/J ALEXANDER	11-Astronomy

NASW 4481 University of Hawaii - Manoa 3745
 OPERATION AND MAINTENANCE OF THE NASA INFRARED TELESCOPE FACILITY

Period	Obligations	
07/09/1990-01/31/1995	FY94: \$2,455,200	TOTAL: \$12,126,840
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D B HALL	HQ/J RAHE	11-Astronomy

NGT 00-050-930 University of Hawaii - Manoa 3753
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/01/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G J TAYLOR	HQ/J K ALEXANDER	32-Geological Sci

NGT 00-030-009 University of Hawaii - Manoa 3746
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/11/1990-04/30/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T THODARSON	HQ/G ASRAR	32-Geological Sci

NGT 00-051-124 University of Hawaii - Manoa 3754
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/05/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B LABONTE	HQ/D HOLLAND	11-Astronomy

NGT 00-030-041 University of Hawaii - Manoa 3747
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/22/1991-12/31/1993	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J N PORTER	HQ/D M BUTLER	33-Oceanography
A CLARKE	HQ/G S WILSON	

NGT 00-051-286 University of Hawaii - Manoa 3755
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/28/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B J LABONTE	HQ/D HOLLAND	11-Astronomy

NGT 00-030-054 University of Hawaii - Manoa 3748
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/06/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K A HORTON	HQ/D M BUTLER	32-Geological Sci
P MOUGINIS-MARK	HQ/G S WILSON	

NGT 00-051-325 University of Hawaii - Manoa 3756
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/06/1994-07/31/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D JEWITT	HQ/D HOLLAND	11-Astronomy

NGT 00-030-104 University of Hawaii - Manoa 3749
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
11/02/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J R CHRISTIAN	HQ/G ASRAR	32-Geological Sci
	HQ/D M BUTLER	

NGT 00-070-385 University of Hawaii - Manoa 3757
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
08/30/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J LASKAR	HQ/D RUSSELL	45-Elec Engr

NASA'S UNIVERSITY PROGRAM IDAHO

IDAHO

NAG 8-269 **Idaho State University** **3758**
JOVE
Period *Obligations*
12/03/1992-02/13/1995 FY94: \$24,805 TOTAL: \$55,805
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S JOHNSON MSFC/F SIX 11-Astronomy
R RODRIGUAZ

NAS 5-26534 **University of Idaho** **3759**
DESIGN DEVELOP FAB AND TESTING/REED-SOLOM ENCODER
Period *Obligations*
04/28/1981-01/15/1993 FY94: \$0 TOTAL: \$1,347,076
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G K MAKI GSFC/W MILLER 45-Elec Engr

NCA 2-794 **University of Idaho** **3760**
DOPPLER WIND MEASUREMENTS OF OUTER PLANET ZONAL WIND PROFILES
Period *Obligations*
02/16/1993-12/31/1993 FY94: \$0 TOTAL: \$6,060
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H ATKINSON ARC/J B POLLACK 11-Astronomy

NCA 2-795 **University of Idaho** **3761**
VENUS RADIATIVE TRANSFER ANALYSIS
Period *Obligations*
02/23/1994-12/31/1993 FY94: \$0 TOTAL: \$16,919
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H ATKINSON ARC/J B POLLACK 31-Atmos Sci

NCC 2-848 **University of Idaho** **3762**
PLANETARY ATMOSPHERE DYNAMICS AND RADIATIVE TRANSFER
Period *Obligations*
04/01/1994-12/31/1994 FY94: \$28,979 TOTAL: \$28,979
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H ATKINSON ARC/J B POLLACK 31-Atmos Sci
ARC/R E YOUNG

NCC 2-862 **University of Idaho** **3763**
DEVELOPMENT OF SENSORY RECEPTORS IN SKELETAL MUSCLE
Period *Obligations*
06/21/1994-04/30/1995 FY94: \$77,148 TOTAL: \$77,148
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M E DESANTIS ARC/D A REIS-BUBENHEIM 51-Biological Sci
ARC/C M WINGET

NCC 2-5006 **University of Idaho** **3764**
INTELLIGENT MECHANISMS ENGINEERING DESIGN PROGRAM
Period *Obligations*
10/07/1993-01/01/1995 FY94: \$17,770 TOTAL: \$17,770
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H ATKINSON ARC/H LUM 49-Engr, NEC

NGT 00-010-003 **University of Idaho** **3765**
IDAHO STAR (STUDENT TEAMS FOR AEROSPACE RESEARCH)
Period *Obligations*
06/16/1993-03/31/1995 FY94: \$0 TOTAL: \$82,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H ATKINSON HQ/D V GALLAWAY 41-Aero Engr

NGT 00-040-038 **University of Idaho** **3766**
NGT-40038/UNIV IDAHO/NAT'L SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
05/29/1991-02/28/1995 FY94: \$240,000 TOTAL: \$730,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T ARMSTRONG HQ/L KEFFER 99-Multi-Discip

ILLINOIS

NGT 00-030-011 **Chicago State University** **3767**
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/25/1990-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J SODEN HQ/G ASRAF 31-Atmos Sci

NAG 8-224 **Illinois Benedictine College** **3768**
JOVE
Period *Obligations*
02/03/1992-07/15/1994 FY94: \$0 TOTAL: \$85,785
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D NOHL MSFC/F SIX 29-Math/Computer, NEC
T WANGLER

NAG 1-1532 **Illinois Institute of Technology** **3769**
EXPANDING FLOW DIAGNOSTIC CAPABILITIES
Period *Obligations*
07/19/1993-07/18/1994 FY94: \$31,602 TOTAL: \$57,204
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C E WARK LARC/M J WALSH 41-Aero Engr

NAG 3-1519 **Illinois Institute of Technology** **3770**
EFFECT OF MILD PRESSURE GRADIENTS ON TUNED AND DETUNED SUBHARMONIC 3-D MODE GROWTH IN 2-D BOUNDARY
Period *Obligations*
09/01/1993-10/31/1994 FY94: \$0 TOTAL: \$77,838
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T C CORKE LERC/R R MANKBADI 41-Aero Engr

NCC 1-167 **Illinois Institute of Technology** **3771**
CONTROLLED EXPERIMENTS ON INSTABILITIES AND TRANSITION TO TURBULENCE ON CONES AT MACH 3.5 AND 8
Period *Obligations*
08/04/1992-09/30/1994 FY94: \$103,568 TOTAL: \$221,215
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T C CORKE LARC/S P WILKINSON 41-Aero Engr

NGT 00-090-076 **Illinois Institute of Technology** **3772**
GSRP/UMF
Period *Obligations*
09/24/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J ORNELAS HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-077 **Illinois Institute of Technology** **3773**
GRADUATE STUDENT RESEARCHERS PROGRAM/UMF
Period *Obligations*
09/17/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J ORNELAS HQ/D RUSSELL 99-Multi-Discip

NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)

NGT 00-090-078 Illinois Institute of Technology 3774
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
 09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
 J ORNELAS HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-079 Illinois Institute of Technology 3775
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 10/09/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. NASA Tech. Officer CASE Category
 J ORNELAS HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-146 Illinois Institute of Technology 3776
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
 09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
 J ORNELAS HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-179 Illinois Institute of Technology 3777
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/27/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
 J ORNELAS HQ/D RUSSELL 99-Multi-Discip

NAG 8-268 Illinois Wesleyan University 3778
 JOVE
Period Obligations
 02/02/1993-05/31/1995 FY94: \$0 TOTAL: \$54,000
Prin. Invest. NASA Tech. Officer CASE Category
 U MSFC/F, SIX 99-Multi-Discip

NAG 1-1343 Northwestern University 3779
 QUALITATIVE MODELING FOR EXPLANATION GENERATION AND REASONING ABOUT PROCED. IN CIVILIAN AVIATION - FDP
Period Obligations
 09/27/1991-08/31/1994 FY94: \$0 TOTAL: \$207,116
Prin. Invest. NASA Tech. Officer CASE Category
 K D FORBUS LARC/K H ABBOTT 22-Computer Science

NAG 2-774 Northwestern University 3780
 EFFECTS OF BRIEF CHANGES IN THE GRAVITY FIELD ON THE CIRCADIAN CLOCK OF MAMMALS
Period Obligations
 03/30/1992-03/31/1995 FY94: \$53,350 TOTAL: \$121,130
Prin. Invest. NASA Tech. Officer CASE Category
 F W TUREK ARC/C E WADE 56-Medical Sciences
 O VAN REETH

NAG 2-846 Northwestern University 3781
 ADAPTIVE LOAD BALANCING AND DATA PLACEMENT IN DISK ARRAYS
Period Obligations
 06/10/1993-10/14/1994 FY94: \$108,000 TOTAL: \$140,548
Prin. Invest. NASA Tech. Officer CASE Category
 P SCHEUERMANN ARC/J R LEKASHMAN 22-Computer Science

NAG 3-747 Northwestern University 3782
 THEORY OF SOLIDIFICATION
Period Obligations
 10/15/1986-04/18/1995 FY94: \$154,000 TOTAL: \$1,159,000
Prin. Invest. NASA Tech. Officer CASE Category
 S H DAVIS LERC/A CHAIT 47-Materials Engr

NAG 3-1405 Northwestern University 3783
 INTERACTIONS BETWEEN SOLIDIFICATION AND COMPOSITIONAL CONVECTION IN ALLOYS
Period Obligations
 12/30/1992-12/31/1995 FY94: \$80,000 TOTAL: \$160,000
Prin. Invest. NASA Tech. Officer CASE Category
 M G WORSTER LERC/A CHAIT 47-Materials Engr
 S H DAVIS LERC/M YAO

NAG 3-1417 Northwestern University 3784
 MICROGRAVITY MATERIALS SCIENCE: RESEARCH AND FLIGHT EXPERIMENT OPPORTUNITIES
Period Obligations
 12/15/1992-12/14/1995 FY94: \$160,000 TOTAL: \$320,000
Prin. Invest. NASA Tech. Officer CASE Category
 P W VORHEES LERC/T K GLASGOW 47-Materials Engr
 LERC/R ASTHANA

NAG 3-1604 Northwestern University 3785
 STRUCTURE AND DYNAMICS OF DIFFUSION FLAMES IN MICROGRAVITY
Period Obligations
 05/23/1994-05/22/1995 FY94: \$74,000 TOTAL: \$74,000
Prin. Invest. NASA Tech. Officer CASE Category
 M MATALON LERC/H D ROSS 46-Mech Engr

NAG 3-1608 Northwestern University 3786
 FILTRATION COMBUSTION FOR MICROGRAVITY APPLICATION ; (1) SMOLDERING (2) COMBUSTION SYNTHESIS ADV MAT
Period Obligations
 05/24/1994-05/25/1995 FY94: \$111,000 TOTAL: \$111,000
Prin. Invest. NASA Tech. Officer CASE Category
 B J MATKOWSKY LERC/S A GOKOGLU 43-Chem Engr

NAG 3-1617 Northwestern University 3787
 NONLINEAR DYNAMICS AND NUCLEATION KINETICS IN NEAR CRITICAL LIQUIDS
Period Obligations
 06/16/1994-06/15/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 A Z PATASHINSKI LERC/R A WILKINSON 13-Physics
 LERC/H K NAHRA

NAG 3-1636 Northwestern University 3788
 FLUID MECHANICS OF CAPILLARY ELASTIC INSTABILITIES IN THE MICROGRAVITY ENVIRONMENT
Period Obligations
 06/29/1994-06/28/1995 FY94: \$65,000 TOTAL: \$65,000
Prin. Invest. NASA Tech. Officer CASE Category
 J B GROTEBERG LERC/D F CHAO 19-Phys Sci, NEC
 D C HALPERN

NAG 5-1779 Northwestern University 3789
 COMPLEX ZWO ABSORBERS: HIGH-REDSHIFT CLUSTERS OF GALAXIES
Period Obligations
 09/10/1991-09/14/1993 FY94: \$0 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
 D M MEYER GSFC/R PETRE 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NAG 5-1801 Northwestern University 3790
HIGH-VELOCITY GAS IN THE SN1911T/3C273 SIGHTLINE
Period Obligations
09/13/1991-03/31/1995 FY94: \$10,245 TOTAL: \$41,525
Prin. Invest. NASA Tech. Officer CASE Category
D M MAYER GSFC/D WEST 11-Astronomy

NAG 8-769 Northwestern University 3798
COARSENING IN SOLID- LIQUID MIXTURES
Period Obligations
04/11/1989-04/30/1994 FY94: \$0 TOTAL: \$494,017
Prin. Invest. NASA Tech. Officer CASE Category
P W VOORHEES MSFC/D A FRAZIER 47-Materials Engr
S C HARDY

NAG 5-1944 Northwestern University 3791
PLATE MOTION, REGIONAL DEFORMATION AND TIME VARIATION OF PLATE MOTION FROM STUDIES INTEGRATING...
Period Obligations
03/16/1992-03/31/1995 FY94: \$75,000 TOTAL: \$217,000
Prin. Invest. NASA Tech. Officer CASE Category
R G GORDON GSFC/B G BILLS 32-Geological Sci

NAG 8-1020 Northwestern University 3799
LOW TEMPERATURE UNBALANCED MAGNETRON DEPOSITION OF HARD, WEAR-RESISTANT COATINGS FOR LIQUID-FILM BEA
Period Obligations
02/11/1994-02/10/1995 FY94: \$77,972 TOTAL: \$77,972
Prin. Invest. NASA Tech. Officer CASE Category
W D SPROUL MSFC/L E MOORE 12-Chemistry
M E GRAHAM MSFC/R L THOM
T P CHANG

NAG 5-2003 Northwestern University 3792
GPS GEODETIC MONITORING OF SOUTH AMERICA-NAZCA CONVERGENCE
Period Obligations
07/01/1992-02/28/1995 FY94: \$34,188 TOTAL: \$74,188
Prin. Invest. NASA Tech. Officer CASE Category
S A STEIN GSFC/B G BILLS 32-Geological Sci

NAG 8-1061 Northwestern University 3800
MICROGRAVITY AND NORMAL GRAVITY STUDIES
Period Obligations
06/16/1994-06/15/1995 FY94: \$55,000 TOTAL: \$55,000
Prin. Invest. NASA Tech. Officer CASE Category
J M TORKELSON MSFC/J P DOWNEY 47-Materials Engr

NAG 5-2105 Northwestern University 3793
OBSERVATIONS OF BRIGHT H_{II} OBJECTS IN M42
Period Obligations
10/08/1992-01/31/1995 FY94: \$7,059 TOTAL: \$17,999
Prin. Invest. NASA Tech. Officer CASE Category
F YUSEF-ZADEH GSFC/D WEST 11-Astronomy

NAG 9-475 Northwestern University 3801
INTERFACE ISSUES IN QUALITATIVE MODELING FOR SPACE SYSTEM ENGINEERING
Period Obligations
09/28/1990-09/01/1994 FY94: \$0 TOTAL: \$197,349
Prin. Invest. NASA Tech. Officer CASE Category
K FORBUS JSC/J MALIN 22-Computer Science

NAG 5-2431 Northwestern University 3794
STRAIN ACCUMULATION MONITORING IN THE NEW MADRID SEISMIC ZONE USING THE GLOBAL POSITIONING SYSTEM
Period Obligations
11/09/1993-11/14/1994 FY94: \$77,844 TOTAL: \$77,844
Prin. Invest. NASA Tech. Officer CASE Category
S STEIN GSFC/B G BILLS 32-Geological Sci

NAG 9-734 Northwestern University 3802
HAPTIC DISPLAY FOR EVA TRAINING
Period Obligations
06/06/1994-02/28/1995 FY94: \$47,995 TOTAL: \$47,995
Prin. Invest. NASA Tech. Officer CASE Category
J E COLGATE JSC/C J CULBERT 29-Math/Computer, NEC

NAG 5-2432 Northwestern University 3795
SMALL SCALE SUBSTRUCTURE WITHIN THE COMA CLUSTER OF GALAXIES
Period Obligations
11/12/1993-11/30/1994 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
M ULMER GSFC/D WEST 11-Astronomy

NAGW 2522 Northwestern University 3803
STRAIN ACCUMULATION MONITORING IN THE NEW MADRID SEISMIC ZONE USING THE GLOBAL POSITIONING SYSTEM
Period Obligations
07/18/1991-06/14/1993 FY94: \$0 TOTAL: \$59,517
Prin. Invest. NASA Tech. Officer CASE Category
S STEIN HQ/M BALTUCK 32-Geological Sci
HQ/B J MALCOLM

NAG 5-2716 Northwestern University 3796
THE EXTRAGALACTIC X-RAY BACKGROUND IN 0.2 - 2 KEV RANGE
Period Obligations
09/09/1994-09/14/1995 FY94: \$32,332 TOTAL: \$32,332
Prin. Invest. NASA Tech. Officer CASE Category
D WANG GSFC/D WEST 11-Astronomy

NAGW 2526 Northwestern University 3804
THEORETICAL STUDIES OF HIGH ENERGY TRANSIENTS
Period Obligations
05/29/1991-12/31/1994 FY94: \$32,000 TOTAL: \$213,519
Prin. Invest. NASA Tech. Officer CASE Category
R E TAAM HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAG 5-2717 Northwestern University 3797
THE SHADOWING EFFECT OF THE GALAXY NGC 4244 ON THE COSMIC X-RAY BACKGROUND (\$5,958)
Period Obligations
09/07/1994-03/14/1996 FY94: \$33,958 TOTAL: \$33,958
Prin. Invest. NASA Tech. Officer CASE Category
Q WANG GSFC/R PETRE 11-Astronomy

NAGW 2695 Northwestern University 3805
CLIMATE STABILITY: THE ROLE OF THE HYDROLOGICAL CYCLE AND THE THERMOHALINE CIRCULATION
Period Obligations
09/09/1991-12/31/1994 FY94: \$45,636 TOTAL: \$140,270
Prin. Invest. NASA Tech. Officer CASE Category
G E BIRCHFIELD HQ/R H THOMAS 39-Env Sci, NEC
HQ/R A SCHIFFER

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NAGW 2859 Northwestern University 3806
NAGW-2859/NORTHWESTERN UNIV/MULTILAYERED SUPERCONDUCTING TUNNEL JUNCTIONS FOR USE IN ASTROPHYSICAL
Period *Obligations*
01/31/1992-02/14/1995 FY94: \$191,720 TOTAL: \$555,725
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J B KETTERSON HQ/J K ALEXANDER 11-Astronomy
HQ/D A HOLLAND

NAGW 2935 Northwestern University 3807
PHYSICS AND INTERPRETATION OF HIGH LUMINOSITY SOURCES
Period *Obligations*
02/27/1992-12/31/1994 FY94: \$78,000 TOTAL: \$234,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G S MILLER HQ/L J KALUZIENSKI 11-Astronomy
R E TAAM HQ/A N BUNNER

NAGW 2936 Northwestern University 3808
GRAVITATIONAL RADIATION SOURCES
Period *Obligations*
02/27/1992-12/31/1994 FY94: \$45,000 TOTAL: \$116,994
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L S FINN HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3615 Northwestern University 3809
MECHANICAL MODULATION OF STRIATED MUSCLE PHENOTYPE
Period *Obligations*
05/26/1993-05/31/1995 FY94: \$60,885 TOTAL: \$120,620
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R S DECKER HQ/T W HALSTEAD 51-Biological Sci

NAGW 3693 Northwestern University 3810
ANALYSIS OF DISTRIBUTION AND MORPHOLOGY OF MAJOR FEATURES FOR AN UNDERSTANDING OF THE TECTONICS
Period *Obligations*
08/03/1993-05/31/1994 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M JURDY HQ/J T BERGSTRAHL 32-Geological Sci

NAGW 4008 Northwestern University 3811
MECHANISMS OF VESTIBULAR FUNCTION AND DYSFUNCTION
Period *Obligations*
05/11/1994-10/01/1994 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B W PETERSON HQ/V THORNE 56-Medical Sciences

NAS 3-26810 Northwestern University 3812
APPLICATION OF DIFFUSION BARRIER COATINGS TO CERAMIC FIBER FOR NICKEL ALUMINIDE COMPOSTIES
Period *Obligations*
12/10/1992-10/13/1994 FY94: \$0 TOTAL: \$149,909
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E BOSS LERC/R R BOWMAN 47-Materials Engr

NCA 2-561 Northwestern University 3813
ADVANCED CRAY-BASED SOFTWARE TECHNIQUES FOR FD-TD MODELING OF RADAR CROSS SECTION.
Period *Obligations*
10/04/1990-11/30/1992 FY94: \$0 TOTAL: \$79,993
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A TAFLOVE ARC/P GOORJIAN 41-Aero Engr

NCA 2-562 Northwestern University 3814
FD-TD COMPUTATIONAL STUDY OF THE RADAR CROSS SECTION OF WIDE-DYNAMIC RANGE 3-D TARGETS.
Period *Obligations*
10/04/1990-11/30/1992 FY94: \$0 TOTAL: \$59,998
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A TAFLOVE ARC/P GOORJIAN 41-Aero Engr

NCA 2-727 Northwestern University 3815
COMPUTATIONAL MODELING AND DESIGN OF SUB-MILLIMETER SCALE FEMTOSECOND ALL-OPTICAL SWITCHES AND LOGIC
Period *Obligations*
06/29/1992-08/31/1993 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A TAFLOVE ARC/P GOORJIAN 29-Math/Computer, NEC

NCA 2-772 Northwestern University 3816
ADVANCED CRAY-BASED MASSIVELY PARALLEL SOFTWARE FOR FD-TD MODELING OF RADAR CROSS SECTION
Period *Obligations*
12/02/1992-10/31/1993 FY94: \$0 TOTAL: \$39,998
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A TAFLOVE ARC/P GOORJIAN 41-Aero Engr

NCC 2-773 Northwestern University 3817
ASSESSING THE IMPACT OF PILOT COMMUNICATION OF PERFORMANCE; STATUS, ROLES, AND NORMAL VS NONNORMAL...
Period *Obligations*
10/20/1992-08/31/1993 FY94: \$0 TOTAL: \$39,959
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M T PALMER ARC/B G KANKI 62-Social Aspects
ARC/J M ORASANU

NCC 2-774 Northwestern University 3818
THEORETICAL STUDIES OF RATE COEFFICIENTS FOR GAS PHASE REACTIONS INVOLVED IN THE COMBUSTION OF.....
Period *Obligations*
10/20/1992-11/30/1994 FY94: \$64,283 TOTAL: \$110,428
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G C SCHATZ ARC/S R LANGHOFF 12-Chemistry

NGT 00-050-571 Northwestern University 3819
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/24/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S STEIN HQ/F C OWENS 32-Geological Sci

NGT 00-050-769 Northwestern University 3820
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/25/1991-03/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S H DAVIS HQ/F C OWENS 21-Mathematics

NGT 00-050-781 Northwestern University 3821
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/01/1991-09/30/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S H DAVIS HQ/F C OWENS 21-Mathematics

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NGT 00-050-902 Northwestern University 3822
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/29/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
B J MATROWSKI HQ/J ALEXANDER 21-Mathematics
A BAYLISS

NGT 00-050-907 Northwestern University 3823
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/29/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
J B KETTERSON HQ/J ALEXANDER 13-Physics

NGT 00-051-083 Northwestern University 3824
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
B CARPENTER HQ/B CARPENTER 21-Mathematics

NGT 00-051-233 Northwestern University 3825
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
J E COLGATE JSC/S GOLDSTEIN 46-Mech Engr

NGT 00-051-301 Northwestern University 3826
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
J B KETTERSON HQ/D HOLLAND 13-Physics

NGT 00-051-349 Northwestern University 3827
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
S C BANKOFF HQ/G A LESANE 46-Mech Engr

NGT 00-070-355 Northwestern University 3828
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
09/02/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
T MARKS HQ/D K RUSSELL 12-Chemistry

NAG 8-267 Parks College of St. Louis University 3829
JOVE
Period Obligations
02/02/1993-05/31/1995 FY94: \$28,250 TOTAL: \$87,250
Pnn. Invest. NASA Tech. Officer CASE Category
C E MONFORT MSFC/F SIX 99-Multi-Discip

NAG 1-1563 Southern Illinois University - Carbondale 3830
APPLICATIONS OF QUANTUM THEORY OF ATOMIC AND MOLECULAR
SCATTERING TO PROBLEMS IN HYPERSONIC FLOW
Period Obligations
12/17/1993-12/16/1994 FY94: \$86,974 TOTAL: \$86,974
Pnn. Invest. NASA Tech. Officer CASE Category
F B MALIK LARC/W E MEADOR 13-Physics
LARC/E J CONWAY

NCA 2-718 Southern Illinois University - Carbondale 3831
HIGH SPEED GAS CHROMATOGRAPHY OF VOLATILE SUBSTANCE S
Period Obligations
05/21/1992-12/06/1994 FY94: \$0 TOTAL: \$46,245
Pnn. Invest. NASA Tech. Officer CASE Category
J B PHILLIPS ARC/J R VALENTIN 12-Chemistry

NCC 5-70 Southern Illinois University - Carbondale 3832
INVESTIGATION OF SOURCE LOCATION DETERMINATION FRO M
MAGSAT MAGNETIC ANOMALIES: THE EULER METHOD...
Period Obligations
05/12/1994-01/31/1995 FY94: \$14,000 TOTAL: \$14,000
Pnn. Invest. NASA Tech. Officer CASE Category
D N RAVAT GSFC/P TAYLOR 32-Geological Sci
GSFC/H V FREY

NGT 00-051-366 Southern Illinois University - Carbondale 3833
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/24/1994-07/31/1995 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
D L MOLFESE HQ/G LESANE 61-Biol Aspects

NGT 00-070-233 Southern Illinois University - Carbondale 3834
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
07/15/1991-08/14/1995 FY94: \$22,000 TOTAL: \$88,000
Pnn. Invest. NASA Tech. Officer CASE Category
J B PHILLIPS HQ/F C OWENS 12-Chemistry

NCC 2-837 Southern Illinois University - Edwardsville 3835
AUTOMATION: DECISION AID OR DECISION MAKER?
Period Obligations
01/12/1994-09/30/1994 FY94: \$106,787 TOTAL: \$106,787
Pnn. Invest. NASA Tech. Officer CASE Category
J J SKITKA ARC/E A PALMER 62-Social Aspects
ARC/K M CORKER

NAG 2-380 University of Chicago 3836
DATA REDUCTIONS AND ANALYSIS FOR THE UNIV OF
CHICACHARGED PARTICLE INSTRUMENT ON THE PIONEER 10
AND
Period Obligations
11/01/1987-10/31/1995 FY94: \$350,000 TOTAL: \$4,091,753
Pnn. Invest. NASA Tech. Officer CASE Category
J A SIMPSON ARC/L E LASHER 13-Physics
ARC/R A CRAIG

NAG 2-785 University of Chicago 3837
PHYSIOLOGY OF THE VESTIBULAR SYSTEM
Period Obligations
06/04/1992-03/31/1994 FY94: \$0 TOTAL: \$58,200
Pnn. Invest. NASA Tech. Officer CASE Category
J M GOLDBERG ARC/M L CORCORAN 51-Biological Sci
ARC/C E WADE

NASA'S UNIVERSITY PROGRAM **ILLINOIS (Continued)**

NAG 2-6001 University of Chicago 3838
 REAL-TIME DATA/VIDEO/VOICE UPLINK AND DOWNLINK FOR THE
 KUIPER AIRBORNE OBSERVATORY (KAO)
Period Obligations
 08/22/1994-06/30/1995 FY94: \$28,000 TOTAL: \$28,000
Prin. Invest. NASA Tech. Officer CASE Category
 R A LOEWINSTEIN ARC/R YEE 41-Aero Engr
 J C SWEITZER ARC/D J TUCKER
 D B COLE

NAG 5-706 University of Chicago 3839
 ASTROPHYSICAL STUDIES OF IMP SATELLITE DATA
Period Obligations
 10/01/1985-09/30/1995 FY94: \$136,108 TOTAL: \$1,197,827
Prin. Invest. NASA Tech. Officer CASE Category
 J A SIMPSON GSFC/G BULLOCK 11-Astronomy
 M G MUNOI

NAG 5-873 University of Chicago 3840
 THE DETECTION AND INTERPRETATION OF LONG-TERM
 ATMOSPHERIC CHANGE
Period Obligations
 02/15/1987-12/31/1993 FY94: TOTAL: \$299,398
Prin. Invest. NASA Tech. Officer CASE Category
 J E FREDERICK GSFC/E HILSENATH 31-Atmos Sci

NAG 5-1434 University of Chicago 3841
 UV EXTINCTION IN HIGH LATITUDE CLOUDS
Period Obligations
 08/14/1990-01/31/1995 FY94: \$10,500 TOTAL: \$34,500
Prin. Invest. NASA Tech. Officer CASE Category
 D E WELTY GSFC/D WEST 11-Astronomy

NAG 5-1454 University of Chicago 3842
 ANALYZING/INTERPRETING GAMMA-RAY BURST SPECTRA
Period Obligations
 08/27/1990-06/30/1995 FY94: \$35,000 TOTAL: \$174,470
Prin. Invest. NASA Tech. Officer CASE Category
 D Q LAMB GSFC/J P NORRIS 11-Astronomy
 GSFC/D A KNIFFEN

NAG 5-1485 University of Chicago 3843
 MAGNETIC FIELD DYNAMICS IN THE SOLAR INTERIOR AND OUTER
 SOLAR ATMOSPHERE
Period Obligations
 11/26/1990-03/31/1995 FY94: \$290,217 TOTAL: \$1,110,493
Prin. Invest. NASA Tech. Officer CASE Category
 R ROSNER GSFC/T J BIRMINGHAM 13-Physics

NAG 5-1757 University of Chicago 3844
 THEORETICAL INVESTIGATIONS OF ACTIVE GALACTIC NUCL EI
Period Obligations
 09/16/1991-09/30/1993 FY94: TOTAL: \$93,330
Prin. Invest. NASA Tech. Officer CASE Category
 D Q LAMB GSFC/J P NORRIS 11-Astronomy
 M ZBYSZEWSKA GSFC/C A GEHRELS

NAG 5-1856 University of Chicago 3845
 X-RAY EMISSION AND SPECTRA OF 'HYBRID' GIANT STARS
Period Obligations
 01/09/1992-10/31/1994 FY94: \$0 TOTAL: \$39,242
Prin. Invest. NASA Tech. Officer CASE Category
 R ROSNER GSFC/R PETRE 11-Astronomy

NAG 5-1986 University of Chicago 3846
 APPLICATION OF TOMS MEASUREMENTS TO UV STUDIES
Period Obligations
 05/27/1992-12/31/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 J E FREDERICK GSFC/A L KRUEGER 31-Atmos Sci
 GSFC/P K BHARTIA

NAG 5-2081 University of Chicago 3847
 GAMMA RAYS FROM CLASSICAL NOVAE
Period Obligations
 08/25/1992-09/30/1994 FY94: \$68,000 TOTAL: \$133,000
Prin. Invest. NASA Tech. Officer CASE Category
 J W TRURAN GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NAG 5-2099 University of Chicago 3848
 HIGH ENERGY EMISSION FROM COMPACT OBJECTS
Period Obligations
 09/15/1992-09/14/1994 FY94: \$50,000 TOTAL: \$99,684
Prin. Invest. NASA Tech. Officer CASE Category
 P COPPI GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NAG 5-2218 University of Chicago 3849
 CONVECTIVE TURBULENCE AND MIXING IN ASTROPHYSICS
Period Obligations
 02/23/1993-11/30/1994 FY94: \$500,000 TOTAL: \$825,000
Prin. Invest. NASA Tech. Officer CASE Category
 R ROSNER GSFC/J R FISCHER 13-Physics
 N BRUMMELL
 F CATTANEO

NAG 5-2265 University of Chicago 3850
 EUV SPECTROSCOPY OF BL LAC OBJECTS
Period Obligations
 05/04/1993-05/14/1994 FY94: \$0 TOTAL: \$34,952
Prin. Invest. NASA Tech. Officer CASE Category
 A KONIGI GSFC/D WEST 11-Astronomy

NAG 5-2307 University of Chicago 3851
 RESTORATION AND ARCHIVING OF THE DATA FROM EXPERIM ENT
 MEH ON THE SPACECRAFT ISEE-3/ICE
Period Obligations
 06/24/1993-07/14/1995 FY94: \$55,000 TOTAL: \$110,000
Prin. Invest. NASA Tech. Officer CASE Category
 P MEYER GSFC/G BULLOCK 19-Phys Sci, NEC

NAG 5-2474 University of Chicago 3852
 COBE SCIENCE ANALYSIS
Period Obligations
 01/07/1994-01/31/1995 FY94: \$41,240 TOTAL: \$41,240
Prin. Invest. NASA Tech. Officer CASE Category
 S S MEYER GSFC/J C MATHER 11-Astronomy
 GSFC/E DWEK

NAG 5-2626 University of Chicago 3853
 ANISOTROPY OF THE COSMIC MICROWAVE BACKGROUND ON
 LARGE AND MEDIUM ANGULAR SCALES
Period Obligations
 06/28/1994-06/30/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
 S MEYER GSFC/R F SILVERBERG 11-Astronomy
 GSFC/E CHENG

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NAG 5-2660 University of Chicago 3854
ANALYSIS OF CLUSTERING AND STRUCTURE IN THE ANGULA
DISTRIBUTION OF GAMMA RAY BURSTS
Period *Obligations*
07/21/1994-07/31/1995 FY94: \$53,000 TOTAL: \$53,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M QUASHNOCK GSFC/J P NORRIS 11-Astronomy
D Q LAMB GSFC/N WHITE

NAG 5-2687 University of Chicago 3855
TEMPORAL AND SPECTRAL PROPERTIES OF GALACTIC BLACK HOLE
CANDIDATES
Period *Obligations*
08/16/1994-08/31/1995 FY94: \$53,000 TOTAL: \$53,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D Q LAMB GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 8-886 University of Chicago 3856
CLIMATIC VARIATION OF STORMS
Period *Obligations*
07/16/1991-11/01/1994 FY94: \$0 TOTAL: \$195,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J FUJITA MSFC/S J GOODMAN 31-Atmos Sci
MSFC/J E ARNOLD

NAG 8-1070 University of Chicago 3857
CLIMATOLOGICAL INFLUENCE OF STORMS
Period *Obligations*
08/25/1994-08/24/1995 FY94: \$75,000 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T T FAJITA MSFC/S J GOODMAN 31-Atmos Sci

NAG 9-47 University of Chicago 3858
CHEM PLANETS + METEORITES
Period *Obligations*
02/01/1983-02/01/1994 FY94: \$0 TOTAL: \$800,609
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J V SMITH JSC/I D BROWNE 13-Physics
I M STEELE

NAG 9-51 University of Chicago 3859
ISOTOPE STUDIES MOON + METEORITES
Period *Obligations*
02/01/1983-12/01/1993 FY94: \$0 TOTAL: \$2,084,758
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R N CLAYTON JSC/I D BROWNE 11-Astronomy
T K MAYEDA
I D HUTCHESON

NAG 9-106 University of Chicago 3860
DEVELOPMENT/X-RAY FLOURESCENCE FACILITY
Period *Obligations*
06/01/1985-06/01/1994 FY94: \$0 TOTAL: \$855,579
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S R SUTTON JSC/I D BROWNE 59-Life Sci, NEC

NAG 9-498 University of Chicago 3861
TRACE ELEMENT AND ISOTOPE STUDIES IN OXIDE/PHOSPHA
TE/SILICATE INCLUSIONS OF ITON METEORITES
Period *Obligations*
04/01/1991-04/01/1994 FY94: \$0 TOTAL: \$24,929
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F J OLSEN JSC/I D BROWNE 19-Phys Sci, NEC

NAGW 830 University of Chicago 3862
FUNDAMENTAL STUDIES IN HIGH ENERGY ASTROPHYSICS
Period *Obligations*
10/01/1985-09/30/1993 FY94: \$0 TOTAL: \$740,105
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D Q LAMB JR HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 1284 University of Chicago 3863
THEORETICAL STUDIES IN HIGH ENERGY
Period *Obligations*
04/18/1988-12/31/1993 FY94: \$0 TOTAL: \$258,231
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D Q LAMB HQ/G C CLAYTON 13-Physics
HQ/W V JONES

NAGW 1321 University of Chicago 3864
FUNDAMENTAL STUDIES
Period *Obligations*
06/20/1988-01/31/1995 FY94: \$50,000 TOTAL: \$347,472
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D N SCHRAMM HQ/G C CLAYTON 11-Astronomy

NAGW 1475 University of Chicago 3865
ACCURATE GROUND BASED CALIBRATION OF HRS-HST
Period *Obligations*
10/25/1988-02/28/1994 FY94: \$0 TOTAL: \$183,326
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L M HOBBS HQ/G C CLAYTON 13-Physics

NAGW 1508 University of Chicago 3866
THE HISTORY OF LIFE IN A COSMIC ENVIRONMENT
Period *Obligations*
11/17/1988-10/31/1994 FY94: \$0 TOTAL: \$259,809
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M RAUP HQ/J D RUMMEL 32-Geological Sci

NAGW 1527 University of Chicago 3867
THE FOSSIL RECORD OF EVOLUTION ANALYSIS OF EXTINCTION
Period *Obligations*
12/06/1988-11/14/1994 FY94: \$0 TOTAL: \$159,891
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M RAUP HQ/M MEYER 32-Geological Sci

NAGW 1636 University of Chicago 3868
HIGH ENERGY EMISSION FROM THE JETS IN ACTIVE GALACTIC
NUCLEI
Period *Obligations*
01/31/1989-01/31/1995 FY94: \$75,000 TOTAL: \$301,187
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A KONIGL HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 1685 University of Chicago 3869
REMOTE SENSING DATA PROBLEMS
Period *Obligations*
02/24/1989-09/30/1994 FY94: \$0 TOTAL: \$226,527
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ROSNER HQ/J D BOHLIN 13-Physics
HQ/S KANE

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NAGW 1693 University of Chicago 3870
THE FOSSIL RECORD OF EVOLUTION DATA ON DIVERSIFICATION
Period *Obligations*
03/01/1989-01/31/1994 FY94: \$0 TOTAL: \$205,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J J SEPKOSKI HQ/J D RUMMEL 32-Geological Sci

NAGW 1847 University of Chicago 3871
FURTHER DEVELOPMENT OF ALPHA PARTICLE INSTRUMENT WITH ALPHA PROTON AND X-RAY MODES
Period *Obligations*
03/13/1990-09/30/1994 FY94: \$222,161 TOTAL: \$977,674
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T ECONOMOU HQ/P R MAHAFFY 32-Geological Sci

NAGW 1982 University of Chicago 3872
EXPERIMENTS IN HIGH ENERGY ASTROPHYSICS
Period *Obligations*
04/25/1990-10/31/1994 FY94: \$100,000 TOTAL: \$1,725,401
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P MEYER HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 1995 University of Chicago 3873
STUDIES OF THE COSMIC RADIATION AT HIGH ENERGIES; HEAT A HIGH ENERGY ANTIMATTER TELESCOPE
Period *Obligations*
02/26/1990-10/31/1994 FY94: \$300,000 TOTAL: \$2,345,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D MULLER HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 2122 University of Chicago 3874
A THEORETICAL INVESTIGATION OF THE DYNAMICS OF THE SOLAR WIND AND MAGNETIC FIELDS
Period *Obligations*
05/22/1990-12/31/1995 FY94: \$86,305 TOTAL: \$687,604
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E N PARKER HQ/J D BOHLIN 13-Physics
HQ/S KANE

NAGW 2272 University of Chicago 3875
COLLABORATIVE RESEARCH OXYGEN ISOTOPIC HETEROGENEITY IN OLIVINE AND PYROXENE FROM ORDINARY CAR
Period *Obligations*
02/22/1991-10/31/1995 FY94: \$23,019 TOTAL: \$96,372
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I M STEELE HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2368 University of Chicago 3876
POST-LAUNCH DATA ANALYSIS FOR THE COSMIC RAY ISOTOPE EXPERIMENT
Period *Obligations*
03/15/1991-09/30/1994 FY94: \$0 TOTAL: \$924,685
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A SIMPSON HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 2379 University of Chicago 3877
ACCRETION AND OUTFLOW PHENOMENA YOUNG STELLAR OBJECTS
Period *Obligations*
03/18/1991-02/28/1995 FY94: \$25,701 TOTAL: \$245,873
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A KOENIGL HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2578 University of Chicago 3878
MARS '94 PARTICIPATING SCIENTIST AND COINVESTIGATOR PROGRAM
Period *Obligations*
08/16/1991-10/31/1993 FY94: \$0 TOTAL: \$345,008
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T ECONOMOU HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2588 University of Chicago 3879
ICE-SHEET MODELING BY CONTROL METHODS
Period *Obligations*
08/26/1991-12/31/1994 FY94: \$0 TOTAL: \$62,067
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D MACAYEAL HQ/R H THOMAS 39-Env Sci, NEC
HQ/R A SCHIFFER

NAGW 2610 University of Chicago 3880
THE INTERSTELLAR CLOUD AROUND THE SOLAR SYSTEM
Period *Obligations*
08/20/1991-02/28/1994 FY94: \$0 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P C FRISCH HQ/W V JONES 11-Astronomy
HQ/J C LING

NAGW 2959 University of Chicago 3881
SPACE EXPLORERS OUTREACH PROGRAM
Period *Obligations*
03/03/1992-02/28/1993 FY94: \$0 TOTAL: \$2,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A HARPER HQ/L S LAPIANA 11-Astronomy
HQ/C J PELLERIN

NAGW 3057 University of Chicago 3882
DESIGN AND CONSTRUCTION OF AN ADIABATIC REFRIGERATOR AND BOLOMETER ARRAY
Period *Obligations*
04/24/1992-03/31/1994 FY94: \$25,000 TOTAL: \$109,686
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H HILDEBRAND HQ/L J CAROFF 11-Astronomy

NAGW 3069 University of Chicago 3883
STELLAR ORIGINS AND INTERSTELLAR CARRIERS OF NUCLEOSYNTHETIC ISOTOPIC ANOMALIES
Period *Obligations*
05/07/1992-03/31/1995 FY94: \$40,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R CLAYTON HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3078 University of Chicago 3884
NAGW-3078/UNIV CHICAGO/A SPACE DUST EXPERIMENT FOR MEASUREMENT OF THE DISTRIBUTION OF MAN-MADE
Period *Obligations*
05/26/1992-06/30/1994 FY94: \$0 TOTAL: \$200,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A J TUZZOLINO HQ/H C BRINTON 31-Atmos Sci

NAGW 3114 University of Chicago 3885
NAGW-3114/UNIV CHICAGO/STATISTICAL ANALYSIS OF STRATOSPHERIC TEMPERATURE AND OZONE PROFILE DATA
Period *Obligations*
06/21/1992-06/30/1994 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G C TIAO HQ/J A KAYE 31-Atmos Sci
HQ/R E MURPHY

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NAGW 3212 University of Chicago 3886
NAGW-3212/UNIV CHICAGO/KINETICS OF VOLATILIZATION OF INTERSTELLAR GRAINS
Period *Obligations*
09/29/1992-03/31/1995 FY94: \$55,000 TOTAL: \$135,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L GROSSMAN HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3651 University of Chicago 3894
DEVELOPMENT OF X-RAY FLUORESCENCE AND X-RAY ABSORPTION SPECTROSCOPY FACILITY
Period *Obligations*
06/15/1993-03/31/1995 FY94: \$66,504 TOTAL: \$136,508
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S SUTTON HQ/J BOYCE 32-Geological Sci

NAGW 3252 University of Chicago 3887
NAGW-3252/UNIV CHICAGO/SPACE EXPLORERS OUTREACH PROGRAM
Period *Obligations*
10/29/1992-07/31/1994 FY94: \$0 TOTAL: \$4,800
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A HARPER HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 3797 University of Chicago 3895
NAGW-3797/UNIV CHICAGO/POST LAUNCH DATA ANALYSIS FOR ENERGETIC HEAVY ION COMPOSITION EXPERIMENT
Period *Obligations*
11/09/1993-09/30/1994 FY94: \$85,000 TOTAL: \$85,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A SIMPSON HQ/W V JONES 13-Physics
HQ/J D BOHLIN

NAGW 3340 University of Chicago 3888
CHEMICAL ASPECTS OF THE ORIGIN OF THE SOLAR SYSTEM
Period *Obligations*
01/13/1993-11/30/1994 FY94: \$206,299 TOTAL: \$405,089
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L GROSSMAN HQ/H C BRINTON 32-Geological Sci

NAGW 3894 University of Chicago 3896
STUDIES OF THE COSMIC RADIATION AT HIGH ENERGIES/NAGW3894
Period *Obligations*
03/29/1994-10/31/1995 FY94: \$300,000 TOTAL: \$300,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S SWORDY HQ/W V JONES 13-Physics
HQ/J D BOHLIN

NAGW 3342 University of Chicago 3889
PRESOLAR GRAINS AND THE EARLY SOLAR SYSTEM
Period *Obligations*
01/15/1993-11/30/1994 FY94: \$160,870 TOTAL: \$313,254
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R LEWIS HQ/H C BRINTON 32-Geological Sci

NAS 1-18239 University of Chicago 3897
HALOGEN OCCULTATION EXPERIMENT (HALOE) SCIENTIFIC SUPPORT
Period *Obligations*
02/20/1986-12/31/1995 FY94: \$10,000 TOTAL: \$149,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E FREDERICK LARC/E M SULLIVAN 31-Atmos Sci
LARC/J M RUSSELL III

NAGW 3345 University of Chicago 3890
ISOTOPIC STUDIES OF THE MOON AND METEORITES
Period *Obligations*
01/15/1993-12/31/1994 FY94: \$250,848 TOTAL: \$487,098
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R N CLAYTON HQ/H C BRINTON 13-Physics

NAS 1-20251 University of Chicago 3898
IN-SITU MONITORING OF ORBITAL DEBRIS (IMOD) AO-W-OAST-1-92
Period *Obligations*
06/27/1994-01/31/1995 FY94: \$47,000 TOTAL: \$47,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A T TUZZOLINO LARC/J L JONES 47-Materials Engr

NAGW 3384 University of Chicago 3891
REFRACTORY INCLUSIONS IN CARBONACEOUS CHONDRITES
Period *Obligations*
02/16/1993-02/28/1995 FY94: \$70,000 TOTAL: \$108,625
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A DAVIS HQ/H C BRINTON 32-Geological Sci

NAS 5-30117 University of Chicago 3899
ENERGETIC HEAVY ION COMPOSITION COSMIC RAY ISOTOPE SUPPORT
Period *Obligations*
11/16/1987-09/30/1993 FY94: \$0 TOTAL: \$2,041,612
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A SIMPSON GSFC/R O WALES 11-Astronomy
K R PYLE
M G MUNDZ

NAGW 3416 University of Chicago 3892
MINERALOGY AND CHEMISTRY OF PLANETS AND METEORITES
Period *Obligations*
03/09/1993-01/31/1995 FY94: \$80,237 TOTAL: \$164,697
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I STEELE HQ/H C BRINTON 32-Geological Sci

NAGW 3569 University of Chicago 3893
TRACE ELEMENT AND ISOTOPE STUDIES OF IRON METEORITE S
Period *Obligations*
04/30/1993-03/31/1995 FY94: \$14,183 TOTAL: \$26,137
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E OLSEN HQ/J BOYCE 31-Atmos Sci

NCC 2-265 University of Chicago 3900
NUMERICAL EXPERIMENTS ON THE DYNAMICS OF GALAXIES
Period *Obligations*
08/01/1983-04/30/1995 FY94: \$15,053 TOTAL: \$243,859
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H MILLER ARC/B F SMITH 11-Astronomy
ARC/P M CASSEN

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NCC 8-7 University of Chicago 3901
A SOUNDING ROCKET PROGRAM FOR THE STUDY OF HIGH ENERGY
CORONAL PHENOMNA
Period Obligations
09/18/1990-01/30/1995 FY94: \$25,000 TOTAL: \$342,620
Prin. Invest. NASA Tech. Officer CASE Category
R ROSNER MSFC/J M DAVIS 13-Physics
J M DAVIS MSFC/E J REICHMANN

NGR14-1227 University of Chicago 3902
NEW RESEARCH GRANT
Period Obligations
02/27/1973-09/30/1994 FY94: \$316,114 TOTAL: \$4,274,890
Prin. Invest. NASA Tech. Officer CASE Category
D A HARPER JR ARC/C D LAUGHLIN 11-Astronomy

NGT 00-050-449 University of Chicago 3903
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/28/1989-09/30/1992 FY94: TOTAL: \$61,847
Prin. Invest. NASA Tech. Officer CASE Category
R C SRIVASTAVA HQ/F C OWENS 19-Phys Sci, NEC

NGT 00-050-529 University of Chicago 3904
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/15/1989-06/30/1993 FY94: TOTAL: \$61,838
Prin. Invest. NASA Tech. Officer CASE Category
A KONIGL HQ/F C OWENS 11-Astronomy

NGT 00-050-617 University of Chicago 3905
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1990-08/31/1993 FY94: TOTAL: \$65,966
Prin. Invest. NASA Tech. Officer CASE Category
D Q LAMB HQ/F C OWENS 13-Physics

NGT 00-050-778 University of Chicago 3906
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/01/1991-06/30/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
D Q LAMB HQ/F C OWENS 11-Astronomy

NGT 00-050-797 University of Chicago 3907
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/01/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
S SWORDY HQ/F C OWENS 13-Physics

NGT 00-050-894 University of Chicago 3908
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/07/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R H HIDEBRAND ARC/M MOORE 11-Astronomy

NGT 00-050-993 University of Chicago 3909
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/17/1992-09/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D N SCHRAMM HQ/J K ALEXANDER 13-Physics

NGT 00-050-997 University of Chicago 3910
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
11/02/1992-09/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
M TURNER HQ/J ALEXANDER 13-Physics

NGT 00-051-059 University of Chicago 3911
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/09/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D Q LAMB HQ/D HOLLAND 11-Astronomy

NGT 00-051-066 University of Chicago 3912
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D MULLER HQ/D HOLLAND 13-Physics

NGT 00-051-100 University of Chicago 3913
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/24/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
S MEYER HQ/J T LYNCH 19-Phys Sci, NEC

NGT 00-051-157 University of Chicago 3914
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/22/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
S MEYER HQ/D HOLLAND 11-Astronomy

NGT 00-051-300 University of Chicago 3915
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
J A SIMPSON HQ/D HOLLAND 13-Physics

NGT 00-051-311 University of Chicago 3916
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R HILDEBRAND ARC/M MOORE 11-Astronomy

NGT 00-051-318 University of Chicago 3917
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-09/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D N SCHRAMM HQ/D HOLLAND 13-Physics

NGT 00-051-322 University of Chicago 3918
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D Q LAMB HQ/P SMITH 13-Physics

NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)

NSG-2057 University of Chicago 3919
 STUDY OF SENSITIVE DETECTION SYSTEM FOR FAR INFRARED ASTRONOMY
Period *Obligations*
 12/14/1974-10/31/1994 FY94: \$11,790 TOTAL: \$2,470,027
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R H HILDEBRAND ARC/L C HAUGHNEY 11-Astronomy

NAG 1-1594 University of Illinois - Chicago Circle 3920
 ADVANCED INTERFEROMETRIC TOMOGRAPHY FOR AERODYNAMICS FLOW MEASUREMENTS
Period *Obligations*
 02/09/1994-02/08/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S S CHA LARC/A W BURNER JR. 46-Mech Engr
 LARC/J C HOPPE

NAG 2-513 University of Illinois - Chicago Circle 3921
 THE SYMBOLIC COMPUTATION AND AUTOMATED ANALYSIS OF TRAJECTORIES OF CONTROL SYSTEMS
Period *Obligations*
 06/01/1988-12/31/1993 FY94: \$0 TOTAL: \$254,899
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R GROSSMAN ARC/G MEYER 49-Engr, NEC

NAG 2-868 University of Illinois - Chicago Circle 3922
 RESEARCH IN ADVANCED METHODS FOR COMPUTATIONAL ELECTROMAGNETICS
Period *Obligations*
 08/11/1993-12/31/1994 FY94: \$0 TOTAL: \$131,125
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K R UMASHANKAR ARC/A C WOO 45-Elec Engr
 S R LAXPATI ARC/M J SCHUH

NAG 3-796 University of Illinois - Chicago Circle 3923
 COMPREHENSIVE MODELING OF TURBULENT MULTI COMPONENT FUEL SPRAYS
Period *Obligations*
 04/16/1987-05/05/1995 FY94: \$30,826 TOTAL: \$272,964
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S K AGGARWAL LERC/D L BULZAN 46-Mech Engr

NAG 3-1034 University of Illinois - Chicago Circle 3924
 PROBABILITY OF BRITTLE FAILURE
Period *Obligations*
 05/10/1989-07/22/1994 FY94: \$0 TOTAL: \$256,073
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A CHUDNOVSKY LERC/N N NEMETH 47-Materials Engr

NAG 3-1135 University of Illinois - Chicago Circle 3925
 NUMERICAL ANALYSIS OF A TIME-DEPENDENT TWO-PHASE NON-REACTING FLOW
Period *Obligations*
 02/09/1990-08/31/1993 FY94: TOTAL: \$68,101
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S K AGGARWAL LERC/D L BULZAN 46-Mech Engr

NAG 3-1469 University of Illinois - Chicago Circle 3926
 GENERATION AND TOOTH CONTACT ANALYSIS OF FORM-GROUND INVOLUTE HELICAL GEARS WITH NEW TOPOLOGY
Period *Obligations*
 04/08/1993-06/30/1994 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F L LITVIN LERC/R F HANDSCHUH 46-Mech Engr
 LERC/J J COX

NAG 3-1607 University of Illinois - Chicago Circle 3927
 EXTENSION OF APPLICATION OF CNC MACHINES FOR GENERATION OF SPIRAL BEVEL GEARS WITH MODIFIED TOPOLOGY
Period *Obligations*
 05/24/1994-05/23/1995 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F L LITVIN LERC/R F HANDSCHUH 46-Mech Engr
 LERC/J J COY

NAG 3-1631 University of Illinois - Chicago Circle 3928
 THE EFFECTS OF SOOTING IN REDUCED GRAVITY DROPLET COMBUSTION
Period *Obligations*
 06/24/1994-06/23/1995 FY94: \$94,015 TOTAL: \$94,015
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M Y CHOI LERC/H D ROSS 46-Mech Engr

NAG 9-764 University of Illinois - Chicago Circle 3929
 ANALYTICAL AND EXPERIMENTAL CHARACTERIZATION OF TWO-PHASE FLOW IN PIPING BENDS AND ELBOWS
Period *Obligations*
 09/19/1994-08/31/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K M HURLBERT JSC/N G ROBERTSON 46-Mech Engr

NAG 1-613 University of Illinois at Urbana-Champaign 3930
 CENTER OF EXCELLENCE IN AEROSPACE COMPUTING RESEARCH AND TECHNOLOGY
Period *Obligations*
 08/26/1985-12/20/1994 FY94: \$466,000 TOTAL: \$4,804,544
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J W LIU LARC/W H BRYANT 22-Computer Science
 R K IYER

NAG 1-1344 University of Illinois at Urbana-Champaign 3931
 CORRELATIVE LIDAR AND RADAR MEASUREMENTS AND SCIENCE INVESTIGATION IN SUPPORT OF UARS PROGRAM
Period *Obligations*
 08/28/1991-06/30/1995 FY94: \$45,001 TOTAL: \$327,301
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C S GARDNER LARC/J G WELLS 31-Atmos Sci
 S J FRANKE

NAG 1-1530 University of Illinois at Urbana-Champaign 3932
 INSTANTANEOUS STRUCTURE OF SEPARATED TURBULENT BOUNDARY LAYERS NLPN 93-619
Period *Obligations*
 08/03/1993-08/02/1995 FY94: \$57,460 TOTAL: \$88,920
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R J ADRIAN LARC/M J WALSH 41-Aero Engr

NAG 1-1545 University of Illinois at Urbana-Champaign 3933
 APPLICATION OF DESIGN OPTIMIZATION TO THE CONTROL OF TRANSPORT PHENOMENA IN MICROGRAVITY
Period *Obligations*
 09/08/1993-09/07/1994 FY94: \$1 TOTAL: \$39,986
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J A DANTZIG LARC/A L FRIPP 19-Phys Sci, NEC
 D A TORTORELLI

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NAG 1-1583 University of Illinois at Urbana-Champaign 3934
INVESTIGATION OF THE STABILITY OF CORNER FLOW A MODEL FOR WING BODY JUNCTION
Period Obligations
12/21/1993-12/31/1994 FY94: \$32,338 TOTAL: \$32,338
Prin. Invest. NASA Tech. Officer CASE Category
S BALACHANDAR LARC/C L STREET 41-Aero Engr
LARC/A KUMAR

NAG 1-1639 University of Illinois at Urbana-Champaign 3935
HIGH ALTITUDE WEATHER BALLOONS TO SUPPORT RAYLEIGH AND SODIUM LIDAR STUDIES OF THE TROPOSPHERE
Period Obligations
08/10/1994-06/30/1995 FY94: \$15,550 TOTAL: \$15,550
Prin. Invest. NASA Tech. Officer CASE Category
G C PAPEN LARC/L R POOLE 31-Atmos Sci
D

NAG 2-308 University of Illinois at Urbana-Champaign 3936
HUMAN PERFORMANCE AND WORKLOAD IN AUTOMATED SYSTEM
Period Obligations
10/01/1987-12/31/1994 FY94: \$75,000 TOTAL: \$1,124,480
Prin. Invest. NASA Tech. Officer CASE Category
C D WICKENS ARC/S G HART 69-Psych, NEC
J ANDERSON

NAG 2-666 University of Illinois at Urbana-Champaign 3937
THE ASSESSMENT AND USE OF WORKLOAD MEASUREMENT TECHNIQUES IN THE ACQUISITION AND PERFORMANCE OF...
Period Obligations
08/16/1990-07/31/1994 FY94: \$0 TOTAL: \$202,568
Prin. Invest. NASA Tech. Officer CASE Category
E DOUCHIN ARC/M M CONNORS 99-Multi-Discip

NAG 2-738 University of Illinois at Urbana-Champaign 3938
SHAPA: AN INTERACTIVE PROTOCOL ANALYSIS TOOL FOR MODELING CREW COMMUNICATIONS, STRATEGIC
Period Obligations
11/14/1991-12/31/1993 FY94: \$0 TOTAL: \$132,620
Prin. Invest. NASA Tech. Officer CASE Category
P M SANDERSON ARC/S G HART 69-Psych, NEC

NAG 2-823 University of Illinois at Urbana-Champaign 3939
HIGH PERFORMANCE COMPUTING FOR ELECTROMAGNETIC MODELING AND SIMULATION OF INTERCONNECTS
Period Obligations
12/23/1992-10/31/1994 FY94: \$75,000 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
J E SCHUTT-AINE ARC/H LOMAX 45-Elec Engr

NAG 2-852 University of Illinois at Urbana-Champaign 3940
PROPOSAL TO INVESTIGATE THE LOSS OF DUCTILITY IN HYDROGEN CHARGED B-TI ALLOYS
Period Obligations
06/30/1993-12/31/1994 FY94: \$0 TOTAL: \$75,430
Prin. Invest. NASA Tech. Officer CASE Category
I M ROBERTSON ARC/H G NELSON 47-Materials Engr

NAG 2-863 University of Illinois at Urbana-Champaign 3941
EFFECTS OF DIET ON METABOLISM OF LABORATORY RATS
Period Obligations
08/04/1993-02/28/1995 FY94: \$0 TOTAL: \$105,742
Prin. Invest. NASA Tech. Officer CASE Category
P C HARRISON ARC/S M HING 51-Biological Sci
R G MAGIRANG ARC/C C JOHNSON
G L RISKOWSKI

NAG 2-871 University of Illinois at Urbana-Champaign 3942
DEVELOPMENT OF FAST ALGORITHMS USING RECURSION AND TESTING FOR COMPUTATIONAL ELECTROMAGNETICS
Period Obligations
08/17/1993-01/31/1995 FY94: \$0 TOTAL: \$150,001
Prin. Invest. NASA Tech. Officer CASE Category
W C CHEW ARC/A C WOO 45-Elec Engr
ARC/M J SCHUH

NAG 2-886 University of Illinois at Urbana-Champaign 3943
ATTENTION AND INFORMATION ACCESS EFFORT IN HEAD-UP DISPLAYS
Period Obligations
02/23/1994-12/31/1994 FY94: \$24,995 TOTAL: \$24,995
Prin. Invest. NASA Tech. Officer CASE Category
C D WICKENS ARC/D C FOYLE 69-Psych, NEC

NAG 2-897 University of Illinois at Urbana-Champaign 3944
IMPLEMENTATION OF THE NAS PARALLEL BENCHMARKS USING CHARM++
Period Obligations
05/17/1994-01/14/1995 FY94: \$99,992 TOTAL: \$99,992
Prin. Invest. NASA Tech. Officer CASE Category
L V KALE ARC/E BARSZCZ 22-Computer Science
ARC/T A LASINSKI

NAG 2-4001 University of Illinois at Urbana-Champaign 3945
DEVELOPMENT OF A ROBUST MODAL STATE MONITORING SYSTEM
DEVELOPMENT OF A ROBUST MODAL STATE MONITORING SYSTEM
Period Obligations
01/31/1994-12/01/1994 FY94: \$27,817 TOTAL: \$27,817
Prin. Invest. NASA Tech. Officer CASE Category
L BERGMAN ARC/L FREUDINGER 41-Aero Engr

NAG 3-1026 University of Illinois at Urbana-Champaign 3946
NUMERICAL INVESTIGATION OF HOT GAS INGESTION BY ST OVLAIRCRAFT
Period Obligations
06/08/1989-12/31/1993 FY94: \$0 TOTAL: \$218,994
Prin. Invest. NASA Tech. Officer CASE Category
S P VANKA LERC/J D HOLDEMAN 41-Aero Engr

NAG 3-1121 University of Illinois at Urbana-Champaign 3947
USE OF ROTATION TO SUPPRESS THERMOSOLUTAL CONVECTION IN DENDRITICALLY SOLIDIFIED BINARY ALLOYS
Period Obligations
01/18/1990-08/16/1993 FY94: \$0 TOTAL: \$97,535
Prin. Invest. NASA Tech. Officer CASE Category
A J PEARLSTEIN LERC/T K GLASGOW 47-Materials Engr

NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)

NAG 3-1134 University of Illinois at Urbana-Champaign 3948
 EFFECT OF ICE ACCRETION ON AIRCRAFT AERODYNAMICS
Period Obligations
 02/13/1990-11/28/1995 FY94: \$110,000 TOTAL: \$482,448
Prin. Invest. NASA Tech. Officer CASE Category
 M B BRAGG LERC/M G POTAPCZUK 41-Aero Engr

NAG 3-1474 University of Illinois at Urbana-Champaign 3955
 STUDY OF TIME DOMAIN ELECTROMAGNETIC SCATTERING
Period Obligations
 05/05/1993-04/17/1995 FY94: \$250,000 TOTAL: \$500,000
Prin. Invest. NASA Tech. Officer CASE Category
 S W LEE LERC/A J ZAMAN 45-Elec Engr

NAG 3-1148 University of Illinois at Urbana-Champaign 3949
 THREE-DIMENSIONAL GRID ADAPTATION TO GEOMETRY AND FLOW SOLUTIONS
Period Obligations
 03/15/1990-05/09/1995 FY94: \$40,000 TOTAL: \$175,000
Prin. Invest. NASA Tech. Officer CASE Category
 K D LEE LERC/Y K CHOO 41-Aero Engr

NAG 3-1552 University of Illinois at Urbana-Champaign 3956
 DIRECT INJECTION OF NATURAL GAS: IN-CYLINDER MEASUREMENTS AND CALCULATIONS
Period Obligations
 01/07/1994-01/04/1995 FY94: \$231,174 TOTAL: \$231,174
Prin. Invest. NASA Tech. Officer CASE Category
 R P LUCHT LERC/M J VALCO 46-Mech Engr
 D N ASSANIS
 J E PETERS

NAG 3-1208 University of Illinois at Urbana-Champaign 3950
 PARALLEL ALGORITHMS FOR TIME INTEGRATION OF NAVIER-STOKES EQUATIONS
Period Obligations
 09/26/1990-06/30/1993 FY94: \$1 TOTAL: \$55,733
Prin. Invest. NASA Tech. Officer CASE Category
 A SAMEH LERC/C W PUTT 29-Math/Computer, NEC
 LERC/S M SIDIK

NAG 3-1637 University of Illinois at Urbana-Champaign 3957
 APPLICATION OF DESIGN OPTIMIZATION TO THE CONTROL OF TRANSPORT PROCESSES IN MICROGRAVITY
Period Obligations
 06/29/1994-06/28/1995 FY94: \$25,503 TOTAL: \$25,503
Prin. Invest. NASA Tech. Officer CASE Category
 J A DANTZIG LERC/A CHAIT 47-Materials Engr

NAG 3-1247 University of Illinois at Urbana-Champaign 3951
 MODELING OF MICROGRAVITY COMBUSTION EXPERIMENTS
Period Obligations
 02/21/1991-12/31/1995 FY94: \$65,000 TOTAL: \$260,000
Prin. Invest. NASA Tech. Officer CASE Category
 J BUDCMERTOR LERC/H D ROSS 21-Mathematics

NAG 5-1295 University of Illinois at Urbana-Champaign 3958
 DETECTION OF GREENHOUSE EFFECTS IN POLAR REGIONS
Period Obligations
 09/12/1989-03/31/1993 FY94: TOTAL: \$234,518
Prin. Invest. NASA Tech. Officer CASE Category
 J W WALSH GSFC/H J ZWALLY 39-Env Sci, NEC

NAG 3-1286 University of Illinois at Urbana-Champaign 3952
 APPLICATION OF DESIGN OPTIMIZATION TO THE CONTROL OF TRANSPORT PROCESSES IN MICROGRAVITY
Period Obligations
 06/20/1991-05/31/1993 FY94: \$0 TOTAL: \$140,024
Prin. Invest. NASA Tech. Officer CASE Category
 J A DANTZIG LERC/A CHAIT 47-Materials Engr
 D A TORTORELLI

NAG 5-1400 University of Illinois at Urbana-Champaign 3959
 ABUNDANCE ENRICHMENTS IN PLANETARY NEBULAE
Period Obligations
 06/29/1990-07/14/1993 FY94: \$0 TOTAL: \$21,999
Prin. Invest. NASA Tech. Officer CASE Category
 J B KALER GSFC/D WEST 11-Astronomy

NAG 3-1360 University of Illinois at Urbana-Champaign 3953
 PERFORMANCE OF LOW POWER PULSED ARCS
Period Obligations
 07/09/1992-03/24/1995 FY94: \$35,000 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
 R L BURTON LERC/J M SANKOVIC 42-Astro Engr
 LERC/E J PENCIL

NAG 5-1565 University of Illinois at Urbana-Champaign 3960
 DELAY GAMMA RAYS FROM CLASSICAL NOVAE
Period Obligations
 04/17/1991-05/14/1993 FY94: \$0 TOTAL: \$65,000
Prin. Invest. NASA Tech. Officer CASE Category
 J W TRURAN GSFC/J NORRIS 11-Astronomy
 GSFC/D A KNIFFEN

NAG 3-1374 University of Illinois at Urbana-Champaign 3954
 FURTHER EXPERIMENTAL INVESTIGATION OF THE LOW-FREQUENCY FLOW OSCILLATION ON AIRFOILS
Period Obligations
 11/05/1992-10/26/1994 FY94: \$35,000 TOTAL: \$62,169
Prin. Invest. NASA Tech. Officer CASE Category
 M B BRAGG LERC/K O ZAMAN 46-Mech Engr

NAG 5-1896 University of Illinois at Urbana-Champaign 3961
 THE ROLE OF TOMS AND SAGE FOR UNDERSTANDING THE EFFECTS OF VOLCANICALLY INDUCED DECREASED RADIATION
Period Obligations
 02/14/1992-02/28/1994 FY94: TOTAL: \$54,990
Prin. Invest. NASA Tech. Officer CASE Category
 P HANDLER GSFC/L WALTER 31-Atmos Sci
 K SCHATTEN

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NAG 5-1900 University of Illinois at Urbana-Champaign 3962
 DIFFUSE SOFT X-RAY EMISSION FROM THE DUMBBELL NEBU LA
 (NGC6853)?

Period	Obligations	
02/20/1992-08/31/1995	FY94: \$48,582	TOTAL: \$108,723
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
Y H CHU	GSFC/R PETRE	11-Astronomy

NAG 5-2493 University of Illinois at Urbana-Champaign 3969
 PARALLEL MULTISCALE ALGORITHMS FOR ASTROPHYSICAL F LIUD
 DYNAMICS SIMULATIONS

Period	Obligations	
02/04/1994-02/14/1995	FY94: \$30,000	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M L NORMAN	GSFC/J R FISCHER	22-Computer Science
D B GANNON		

NAG 5-2018 University of Illinois at Urbana-Champaign 3963
 THE X-RAY STRUCTURE OF THE SUPERNOVA REMNANT W49B

Period	Obligations	
07/08/1992-01/14/1994	FY94: \$0	TOTAL: \$17,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J R DICKEL	GSFC/R PETRE	11-Astronomy

NAG 5-2667 University of Illinois at Urbana-Champaign 3970
 ADAPTIVE PARALLEL METHODS FOR REACTIVE FLUID DYNAMICS
 AND PARTICLE DYNAMICS

Period	Obligations	
08/01/1994-07/31/1995	FY94: \$30,000	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D BALSARA	GSFC/J R FISCHER	11-Astronomy

NAG 5-2040 University of Illinois at Urbana-Champaign 3964
 EOSDIS VERSION O STANDARD DATA FORMAT SUPPORT

Period	Obligations	
07/16/1992-07/31/1995	FY94: \$230,296	TOTAL: \$410,246
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M FOLK	GSFC/E F STOCKER	22-Computer Science

NAG 5-2679 University of Illinois at Urbana-Champaign 3971
 HOT INTERSTELLAR MATTER IN THE MAGELLANIC CLOUDS

Period	Obligations	
08/08/1994-08/14/1995	FY94: \$40,000	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
Y H CHU	GSFC/D WEST	11-Astronomy

NAG 5-2112 University of Illinois at Urbana-Champaign 3965
 A NEW SNR CANDIDATE HIDDEN IN THE LUMINOUS HII REG ION
 N 159

Period	Obligations	
10/08/1992-10/31/1994	FY94: \$1,500	TOTAL: \$7,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
Y H CHU	GSFC/D WEST	11-Astronomy

NAG 8-934 University of Illinois at Urbana-Champaign 3972
 LASER GLAZING FOR IMPROVED MECHANICAL PROPERTIES

Period	Obligations	
08/14/1992-02/13/1993	FY94: ¹	TOTAL: \$5,362
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J MAZUMDER	MSFC/R POORMAN	47-Materials Engr
	MSFC/B BHAT	

NAG 5-2201 University of Illinois at Urbana-Champaign 3966
 DEVELOPMENT OF SCALABLE ALGORITHMS FOR NUMERICAL R
 ELATIVITY

Period	Obligations	
02/23/1993-11/30/1994	FY94: \$30,000	TOTAL: \$59,998
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P E SAYLOR	GSFC/J R FISCHER	22-Computer Science
F SAIED		
E SEIDEL		

NAG 8-976 University of Illinois at Urbana-Champaign 3973
 THE ROLE OF SOLVATION FORCES IN PROTEIN CRYSTALLIZ ATION
 IN MICROGRAVITY

Period	Obligations	
06/29/1993-01/01/1995	FY94: \$125,000	TOTAL: \$250,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E B VAN SWOL	MSFC/M PUSEY	43-Chem Engr
C F ZUKOSKI	MSFC/R SNYDER	

NAG 5-2244 University of Illinois at Urbana-Champaign 3967
 INTELLIGENT COMMAND AND CONTROL SYSTEM FOR SATELLI TE
 GROUND OPERATIONS

Period	Obligations	
04/14/1993-04/14/1995	FY94: \$36,989	TOTAL: \$74,404
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P M JONES	GSFC/A W STOFFEL	22-Computer Science

NAGW 992 University of Illinois at Urbana-Champaign 3974
 OBSERVATIONAL STUDY OF RECENT HIGH-LATITUDE OZONE

Period	Obligations	
11/01/1986-06/30/1993	FY94: \$0	TOTAL: \$311,828
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J WALSH	HQ/J KAYE	31-Atmos Sci
	HQ/D M BUTLER	

NAG 5-2245 University of Illinois at Urbana-Champaign 3968
 SUPERNOVA REMNANTS HIDDEN IN SUPERBUBBLES

Period	Obligations	
04/08/1993-04/14/1996	FY94: \$20,200	TOTAL: \$35,200
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M MACLOW	GSFC/R PETRE	11-Astronomy

NAGW 1104 University of Illinois at Urbana-Champaign 3975
 MICROPHYSICAL THEORY OF DIFFUSE ASTRONOMICAL
 ENVIRONMENTS

Period	Obligations	
06/01/1987-12/31/1994	FY94: \$72,000	TOTAL: \$462,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W D WATSON	HQ/F C GILLET	11-Astronomy
	HQ/R V STACHNIK	

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NAGW 1131 University of Illinois at Urbana-Champaign 3976
RADIO ASTRONOMICAL STUDIES OF COMETS
Period *Obligations*
07/01/1987-12/31/1994 FY94: \$47,997 TOTAL: \$391,281
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L E SNYDER HQ/H C BRINTON 11-Astronomy
HQ/J H RAHE

NAGW 2996 University of Illinois at Urbana-Champaign 3983
THE TERRESTRIAL GRAVITATIONAL WAVE ENVIRONMENT FROM KNOWN SOURCES
Period *Obligations*
03/12/1992-12/31/1993 FY94: \$0 TOTAL: \$13,671
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R F WEBBINK HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 1583 University of Illinois at Urbana-Champaign 3977
STUDIES IN THEORETICAL X-RAY ASTRONOMY
Period *Obligations*
02/14/1989-10/31/1995 FY94: \$107,000 TOTAL: \$672,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F K LAMB HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 3541 University of Illinois at Urbana-Champaign 3984
THERMAL HISTORY AND MANTLE DYNAMICS OF VENUS
Period *Obligations*
04/21/1993-03/14/1995 FY94: \$24,500 TOTAL: \$59,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A T HSUI HQ/J T BERGSTRALH 32-Geological Sci

NAGW 1729 University of Illinois at Urbana-Champaign 3978
DYNAMICS OF STRATOSPHERIC PLANETARY WAVES
Period *Obligations*
03/27/1989-02/28/1995 FY94: \$44,403 TOTAL: \$296,564
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W A ROBINSON HQ/R D MCPETERS 31-Atmos Sci
HQ/M J PRATHER

NAS 1-19950 University of Illinois at Urbana-Champaign 3985
SCIENCE SUPPORT TO THE LITE SCIENCE TEAM
Period *Obligations*
05/19/1993-05/18/1996 FY94: \$81,137 TOTAL: \$106,137
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S GARDNER LARC/G L MADDREA 31-Atmos Sci

NAGW 2299 University of Illinois at Urbana-Champaign 3979
SEARCH FOR INTERSTELLAR AND CIRCUMSTELLAR MOLECULES OF POSSIBLE BIOLOGICAL SIGNIFICANCE
Period *Obligations*
05/21/1991-10/31/1993 FY94: \$0 TOTAL: \$119,976
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L E SNYDER HQ/J A NUTH 19-Phys Sci, NEC

NAS 1-19957 University of Illinois at Urbana-Champaign 3986
SAGE II SCIENTIFIC INVESTIGATIONS
Period *Obligations*
05/13/1993-05/12/1996 FY94: \$65,000 TOTAL: \$135,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N SONG LARC/G L MADDREA 31-Atmos Sci
LARC/M P MC CORMAC

NAGW 2421 University of Illinois at Urbana-Champaign 3980
THEORETICAL PREDICTION OF MULTI-FREQUENCY EMISSION FROM NOVAE IN OUTBURST
Period *Obligations*
04/19/1991-12/31/1994 FY94: \$46,313 TOTAL: \$339,913
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J W TRURAN HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NCA 2-616 University of Illinois at Urbana-Champaign 3987
NON-VERBAL CUES IN COCKPIT COMMUNICATION
Period *Obligations*
05/28/1991-12/31/1993 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C D WICKENS ARC/B G KANKI 62-Social Aspects
L D SEGAL ARC/E A PALMER

NAGW 2554 University of Illinois at Urbana-Champaign 3981
NAGW-2554/UNIV ILLINOIS/ARCHAEBACTERIA AND THE EVOLUTION OF THE CELL
Period *Obligations*
06/10/1991-12/31/1993 FY94: \$0 TOTAL: \$344,379
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C R WOESE HQ/J D RUMMEL 51-Biological Sci

NCA 2-742 University of Illinois at Urbana-Champaign 3988
AERODYNAMICS DESIGN OPTIMIZATION USING THE NAVIER-STOKES EQUATIONS
Period *Obligations*
08/05/1992-08/19/1993 FY94: \$0 TOTAL: \$26,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K D LEE ARC/D KWAK 41-Aero Engr
ARC/S E ROGERS

NAGW 2945 University of Illinois at Urbana-Champaign 3982
STATISTICAL ANALYSIS OF TRIGONOMETRIC PARALLAXES
Period *Obligations*
02/28/1992-12/31/1994 FY94: \$0 TOTAL: \$71,403
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S CASERTANO HQ/R STACHNIK 13-Physics
HQ/E J WEILER

NCA 2-833 University of Illinois at Urbana-Champaign 3989
DESIGN OPTIMIZATION OF MULTI-ELEMENT AIRFOILS WITH THE NAVIER-STOKES EQUATIONS
Period *Obligations*
08/16/1993-08/19/1995 FY94: \$45,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K D LEE ARC/S E ROGERS 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
ILLINOIS (Continued)**

NCC 2-5022 University of Illinois at Urbana-Champaign 3990
SIMPLIFIED MICROMECHANICS MODELS FOR DUCTILE CRACK GROWTH WITH EXPLICIT LENGTH SCALES
Period Obligations
12/21/1993-12/31/1995 FY94: \$80,000 TOTAL: \$80,000
Prin. Invest. NASA Tech. Officer CASE Category
R ARC/T L PANONTIN 49-Engr, NEC

NCC 3-156 University of Illinois at Urbana-Champaign 3991
ANTENNA CONFIGURATION STUDY FOR ATRSS
Period Obligations
12/11/1989-09/30/1993 FY94: \$0 TOTAL: \$220,000
Prin. Invest. NASA Tech. Officer CASE Category
S W LEE LERC/G FUJIKAWA 45-Elec Engr
Y T LO

NCC 3-216 University of Illinois at Urbana-Champaign 3992
A MULTIBEAM ANTENNA STUDY FOR NASA SPACE EXPLORATION INITIATIVE
Period Obligations
05/07/1991-06/30/1993 FY94: \$0 TOTAL: \$95,000
Prin. Invest. NASA Tech. Officer CASE Category
S W LEE LERC/R Q LEE 45-Elec Engr

NCC 5-106 University of Illinois at Urbana-Champaign 3993
EASY-TO-USE SCALABLE DIGITAL LIBRARY TECHNOLOGIES
Period Obligations
09/22/1994-09/22/1997 FY94: \$53,000 TOTAL: \$53,000
Prin. Invest. NASA Tech. Officer CASE Category
M FOLK GSFC/N LAL 99-Multi-Discip

NGT 00-030-112 University of Illinois at Urbana-Champaign 3994
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
J W WEATHERLY HQ/G ASRAR 99-Multi-Discip
HQ/D M BUTLER

NGT 00-040-017 University of Illinois at Urbana-Champaign 3995
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
04/03/1991-01/31/1995 FY94: \$380,000 TOTAL: \$1,468,000
Prin. Invest. NASA Tech. Officer CASE Category
K R SIVIER HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-743 University of Illinois at Urbana-Champaign 3996
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
B W WAH HQ/F C OWENS 22-Computer Science

NGT 00-050-833 University of Illinois at Urbana-Champaign 3997
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/02/1991-08/20/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R K IYER HQ/F C OWENS 22-Computer Science

NGT 00-050-873 University of Illinois at Urbana-Champaign 3998
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/07/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
D GOLDBERG JSC/S GOLDSTEIN 22-Computer Science

NGT 00-051-023 University of Illinois at Urbana-Champaign 3999
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/05/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D A REED ARC/M MOORE 22-Computer Science

NGT 00-051-051 University of Illinois at Urbana-Champaign 4000
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/19/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
M B BRAGG LERC/F MONTEGANI 41-Aero Engr

NGT 00-051-064 University of Illinois at Urbana-Champaign 4001
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
F B VAN SWOL HQ/B CARPENTER 43-Chem Engr

NGT 00-051-251 University of Illinois at Urbana-Champaign 4002
GRADUATE STUDENT RESEARCHERS PROGRAM (UMDF)
Period Obligations
08/18/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D PADUA HQ/P SMITH 22-Computer Science

NGT 00-051-339 University of Illinois at Urbana-Champaign 4003
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/29/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
B W WAH ARC/M MOORE 45-Elec Engr

NGT 00-051-360 University of Illinois at Urbana-Champaign 4004
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
A J PEARLSTEIN HQ/G A LESANE 46-Mech Engr

NASA'S UNIVERSITY PROGRAM ILLINOIS (Continued)

NGT 00-070-107 University of Illinois at Urbana-Champaign 4005
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
12/06/1988-11/30/1992 FY94: TOTAL: \$78,222
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J KUSHNER HQ/F C OWENS 45-Elec Engr

NGT 00-070-292 University of Illinois at Urbana-Champaign 4006
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
11/27/1992-12/31/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S P VANKA HQ/P HUNTER 46-Mech Engr

NGT 00-070-374 University of Illinois at Urbana-Champaign 4007
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
08/22/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R B HABER HQ/D K RUSSELL 46-Mech Engr

NGT 00-090-062 University of Illinois at Urbana-Champaign 4008
THE ALLIANCE FOR SUCCESS AND NASA SUMMER RESEARCH OPPORTUNITIES PROGRAM
Period *Obligations*
05/21/1992-12/31/1994 FY94: \$64,501 TOTAL: \$166,819
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E GRIVES HQ/M S MARGOLIS 99-Multi-Discip

NGT 00-090-066 University of Illinois at Urbana-Champaign 4009
COMMITTEE ON INSTITUTIONAL COOPERATION ON WOMEN IN SCIENCE AND ENG'G
Period *Obligations*
08/28/1992-07/31/1993 FY94: \$0 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J GIRVES HQ/B L WHITE 99-Multi-Discip
HQ/S MASSENBERG

INDIANA

NAG 5-2501 Ball State University 4010
ULTRAVIOLET OBSERVATIONS OF THE CATAclysmic VARIABLE UU AQR
Period *Obligations*
02/08/1994-02/14/1995 FY94: \$2,500 TOTAL: \$2,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H KAITCHUCK GSFC/D WEST 11-Astronomy

NAG 8-983 De Pauw University 4011
CRYSTAL STUDY
Period *Obligations*
11/18/1993-05/31/1994 FY94: \$11,000 TOTAL: \$11,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H L BROOKS MSFC/D R MC INTOSH 13-Physics
MSFC/D R MC CATHREN

NAGW 2336 De Pauw University 4012
MARS GEOLOGIC MAPPING; DAO HARMAKHIS, AND REULL VA LLES REGION
Period *Obligations*
01/23/1991-12/31/1993 FY94: \$0 TOTAL: \$34,155
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K H PRICE HQ/T A MAXWELL 32-Geological Sci

NAG 8-266 Earlham College 4013
JOVE
Period *Obligations*
12/30/1992-04/17/1995 FY94: \$19,250 TOTAL: \$66,250
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R HIRELY MSFC/F SIX 99-Multi-Discip

NAG 5-1734 Indiana State University 4014
EVIDENCE IN PALAEOLAKE SHORELINES FOR THE NEOTECTONICS OF THE ALTIPLANO
Period *Obligations*
08/13/1991-08/14/1995 FY94: \$25,900 TOTAL: \$152,427
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S DE SILVA GSFC/B G BILLS 32-Geological Sci

NGT 00-050-911 Indiana State University 4015
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/22/1992-06/30/1994 FY94: \$0 TOTAL: \$43,984
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D PRENTICE HQ/J ALEXANDER 51-Biological Sci

NAG 2-756 Indiana Univ.-Purdue U. at Indianapolis 4016
CELL KINETICS AND HISTOMORPHOMETRIC ANALYSIS OF MICROGRAVITATIONAL OSTEOPENIA: (PARE.02B)
Period *Obligations*
01/31/1992-11/30/1994 FY94: \$110,983 TOTAL: \$379,777
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E ROBERTS ARC/C M WINGET 51-Biological Sci
L P GARETTO ARC/P X CALLAHAN

NAG 3-1246 Indiana Univ.-Purdue U. at Indianapolis 4017
A COMPUTATIONAL GRID ORIENTATED DATA BASE FOR THE PARALLEL COMPUTATION OF TURBOMACHINERY PROBLEMS
Period *Obligations*
02/20/1991-06/08/1994 FY94: \$0 TOTAL: \$223,886
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A ECER LERC/R A BLECH 29-Math/Computer, NEC
LERC

NAG 3-1577 Indiana Univ.-Purdue U. at Indianapolis 4018
PARALLEL COMPUTATION OF UNSTEADY FLOWS ON A NETWORK OF WORKSTATIONS
Period *Obligations*
02/28/1994-11/27/1994 FY94: \$80,000 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A ECER LERC/R A BLECH 41-Aero Engr

NCC 2-594 Indiana Univ.-Purdue U. at Indianapolis 4019
CELL KINETIC AND HISTOMORPHOMETRIC ANALYSIS OF MICROGRAVITATIONAL OSTEOPENIA
Period *Obligations*
03/15/1989-10/31/1994 FY94: \$109,998 TOTAL: \$530,742
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E ROBERTS ARC/E M HOLTON 51-Biological Sci

191

**NASA'S UNIVERSITY PROGRAM
INDIANA (Continued)**

NGT 00-051-172 Indiana University - South Bend 4036
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/06/1993-08/31/1994 FY94: \$0 TOTAL: \$15,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A ECER HQ/P HUNTER 45-Elec Engr

NCC 3-317 Manchester College 4037
INTERCALATION OF GRAPHITE FIBERS FOR SPACE POWER APPLICATIONS
Period *Obligations*
09/01/1993-08/28/1995 FY94: \$53,048 TOTAL: \$65,148
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E G MILLER LERC/C HUNG 12-Chemistry

NAG 1-58 Purdue University 4038
STUDY OF METHOD TO PREDICT AND MEASURE TRANSMISSION OF SOUND THROUGH WALLS OF LIGHT AIRCRAFT
Period *Obligations*
03/31/1980-06/30/1994 FY94: \$58,893 TOTAL: \$1,106,208
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J BERNHARD LARC/R J SILCOX 41-Aero Engr
LARC/C A POWELL

NAG 1-157 Purdue University 4039
INTERACTIVE AIRCRAFT FLIGHT CONTROL AND AEROELASTIC STABILIZATION
Period *Obligations*
02/26/1981-09/30/1994 FY94: \$49,872 TOTAL: \$731,778
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A WEISSHAAR LARC/R C SCOTT 41-Aero Engr
D K SCHMIDT

NAG 1-372 Purdue University 4040
COMPUTATIONAL UNSTEADY AERODYNAMICS AND AEROELASTICITY
Period *Obligations*
06/15/1983-07/31/1994 FY94: \$0 TOTAL: \$506,611
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H T YANG LARC/J W EDWARDS 41-Aero Engr
M WILLIAMS LARC/J T BATINA
T A WEISSHAAR

NAG 1-1133 Purdue University 4041
A QUEIT FLOW LUDWIG TUBE FOR STUDY OF TRANSITION IN COMPRESSIBLE BOUNDARY LAYERS.
Period *Obligations*
05/07/1990-12/31/1994 FY94: \$19,000 TOTAL: \$91,341
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S P SCHNEIDER LARC/T OWENS 41-Aero Engr

NAG 1-1173 Purdue University 4042
FREQUENCY DOMAIN ANALYSIS OF RANDOM LOADING OF CRACKED PANELS.
Period *Obligations*
08/06/1990-06/30/1993 FY94: TOTAL: \$33,069
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J F DOYLE LARC/S A RIZZI 41-Aero Engr
LARC/C A POWELL

NAG 1-1201 Purdue University 4043
HOT FILM WALL SHEAR INSTRUMENTATION FOR COMPRESSIBLE BOUNDARY LAYER TRANSITION RESEARCH
Period *Obligations*
12/04/1990-03/31/1994 FY94: \$0 TOTAL: \$29,771
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S P SCHNEIDER LARC/D L GRAY 41-Aero Engr
LARC/M A SCOTT

NAG 1-1306 Purdue University 4044
SELECTING SENSORS AND ACTUATORS AND OPTIMIZING STRUCTURES FOR CONTROL DESIGN
Period *Obligations*
08/02/1991-07/31/1994 FY94: \$0 TOTAL: \$119,905
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E SKELTON LARC/P A COOPER 42-Astro Engr
L D PETERSON LARC/J R NEWSOM

NAG 1-1316 Purdue University 4045
FATIGUE BEHAVIOR OF CONTINUOUS FIBER METAL MATRIX COMPOSITES
Period *Obligations*
08/15/1991-12/31/1993 FY94: TOTAL: \$69,302
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B M HILLBERRY LARC/W S JOHNSON 46-Mech Engr
LARC/C A BIGELOW

NAG 1-1323 Purdue University 4046
MODELLING DAMAGE PROGRESSION IN COMPOSITE LAMINATE D STRUCTURES
Period *Obligations*
08/06/1991-07/31/1994 FY94: \$50,339 TOTAL: \$185,365
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C T SUN LARC/J T WANG 46-Mech Engr
LARC/J M HOUSNER

NAG 1-1366 Purdue University 4047
RATE-DEPENDENT CONSTITUTIVE MODELS FOR HIGH TEMPERATURE POLYMER COMPOSITES UNDER CYCLIC LOADING
Period *Obligations*
01/17/1992-01/08/1995 FY94: \$55,000 TOTAL: \$153,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C T SUN LARC/T S GATES 41-Aero Engr

NAG 1-1473 Purdue University 4048
SHAPE OPTIMIZATION IN A DISTRIBUTED AND COLLABORATIVE MODELLING ENVIRONMENT
Period *Obligations*
01/22/1993-01/07/1995 FY94: \$0 TOTAL: \$30,560
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C BAJAJ LARC/R E SMITH 22-Computer Science
LARC/J J LAMBIOTTE

NAG 1-1509 Purdue University 4049
EVALUATION OF SUBGRID-SCALE MODELS FOR LARGE EDDY SIMULATION OF COMPRESSIBLE TURBULENT FLOWS
Period *Obligations*
05/06/1993-11/05/1994 FY94: \$0 TOTAL: \$38,799
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A BLAISDELL LARC/T B GATSKI 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
INDIANA (Continued)**

NAG 1-1526 **Purdue University** **4050**
FATIGUE CRACK GROWTH IN PANELS UNDER AEROACOUSTIC
RANDOM LOADING NLPN 93-427
Period *Obligations*
08/03/1993-08/02/1995 FY94: \$21,914 TOTAL: \$29,218
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J F DOYLE LARC/S A RIZZI 41-Aero Engr

NAG 1-1601 **Purdue University** **4051**
DEVELOPMENT OF A METHODOLOGY FOR ANALYZING PROPULSION
SYSTEM EFFECTIVENESS OVER A TRAJECTORY
Period *Obligations*
03/14/1994-03/14/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S N MURTHY LARC/J P WEIDNER 41-Aero Engr
LARC/G Y ANDERSON

NAG 1-1607 **Purdue University** **4052**
SUPERSONIC QUIET TUNNEL DEVELOPMENT FOR LAMINAR
TURBULENT TRANSITION RESEARCH
Period *Obligations*
02/25/1994-02/24/1995 FY94: \$41,377 TOTAL: \$41,377
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S P SCHNEIDER LARC/S P WILKINSON 41-Aero Engr

NAG 2-854 **Purdue University** **4053**
HIGH-LIFT AERODYNAMICS
Period *Obligations*
07/16/1993-02/28/1995 FY94: \$50,000 TOTAL: \$79,783
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J P SULLIVAN ARC/L L ERICKSON 41-Aero Engr
S P SCHNEIDER ARC/D J KOGA

NAG 3-481 **Purdue University** **4054**
DYNAMIC PERFORMANCE OF HIGH BYPASS RATIO TURBINE
ENGINES WITH WATER INGESTION
Period *Obligations*
10/26/1983-09/30/1994 FY94: \$1 TOTAL: \$598,704
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S N MURTHY LERC/R J STEINKE 41-Aero Engr

NAG 3-499 **Purdue University** **4055**
AEROELASTICITY OF ADVANCED TURBOPROPS USING 3-D
UNSTEADY AERODYNAMICS
Period *Obligations*
12/05/1983-03/27/1995 FY94: \$30,000 TOTAL: \$641,561
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M H WILLIAMS LERC/G L STEFKO 41-Aero Engr
LERC/L J KIRALY

NAG 3-552 **Purdue University** **4056**
INFLUENCE OF FUEL THERMAL STABILITY ON ATOMIZER DESIGN
AND PERFORMANCE
Period *Obligations*
09/14/1984-02/25/1993 FY94: \$0 TOTAL: \$527,386
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A F LEFEBVRE LERC/R J ROLLBUHLER 46-Mech Engr
LERC/R W NIEDZWIECKI

NAG 3-656 **Purdue University** **4057**
3-D UNSTEADY AERODYNAMIC AND AEROELASTICITY OF
ADVANCED TURBOPROPS
Period *Obligations*
11/11/1985-11/30/1994 FY94: \$109,026 TOTAL: \$891,468
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P S FLEETER LERC/D HOYNIK 41-Aero Engr

NAG 3-825 **Purdue University** **4058**
A COMPENDIUM OF THE AERO-MECHANICS OF GAS TURBINE
ENGINES
Period *Obligations*
12/17/1987-12/19/1992 FY94: \$255 TOTAL: \$286,407
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S FLEETER LERC/F A NEWMAN 41-Aero Engr

NAG 3-943 **Purdue University** **4059**
HOT GAS INJECTION
Period *Obligations*
12/05/1988-03/17/1993 FY94: TOTAL: \$334,310
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J P SULLIVAN LERC/J D HOLDEMAN 41-Aero Engr
S N MURTHY

NAG 3-1038 **Purdue University** **4060**
MEAS OF SPECIES CONCENTRATION AND TEMP IN AXISYMM FLAMES BY
LASER-INDUCED FLOURESCENCE
Period *Obligations*
05/03/1989-12/13/1994 FY94: \$158,243 TOTAL: \$913,210
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N M LAURENDEAU LERC/Y R HICKS 49-Engr, NEC

NAG 3-1207 **Purdue University** **4061**
ACTIVE SUPPRESSION OF AERODYNAMIC INSTABILITIES IN
CENTRIFUGAL COMPRESSORS
Period *Obligations*
09/14/1990-11/30/1994 FY94: \$0 TOTAL: \$170,316
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S FLEETER LERC/L F SCHUMANN 41-Aero Engr

NAG 3-1291 **Purdue University** **4062**
SUPPORT OF THE 10TH NATIONAL SYMPOSIUM OF AIR BREATHING
ENGINES
Period *Obligations*
07/31/1991-12/31/1994 FY94: \$0 TOTAL: \$9,992
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S N MURTHY LERC/D N BOWDITCH 41-Aero Engr

NAG 3-1295 **Purdue University** **4063**
PURDUE UNIVERSITY MINORITY ENGINEERING PROGRAM
Period *Obligations*
11/13/1991-08/31/1994 FY94: \$1 TOTAL: \$145,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M W BLALOCK LERC/D E LACY 46-Mech Engr
LERC/D BOWDITCH

NAG 3-1336 **Purdue University** **4064**
CARBON DIOXIDE CONVERSION: AN INTEGRATED APPROACH TO
IN SITU RESOURCE UTILIZATION FOR A MANNED MARS MISSION
Period *Obligations*
03/30/1992-03/31/1994 FY94: \$0 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C P KUBIAK LERC/A F HEPP 12-Chemistry
D A MORGENSTERN

NAG 3-1629 **Purdue University** **4065**
TECHNICAL SUPPORT FOR THE PUBLICATION OF THE AEROSPACE
STRUCTURAL METALS HANDBOOK
Period *Obligations*
06/24/1994-01/23/1995 FY94: \$17,485 TOTAL: \$17,485
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H MINDLIN LERC/J R REAGAN 47-Materials Engr

**NASA'S UNIVERSITY PROGRAM
INDIANA (Continued)**

NAG 5-1125 **Purdue University** **4066**
GLOBAL CLOUD CLIMATOLOGIES VALIDATING NUMERICAL
MODELS
Period *Obligations*
04/01/1989-09/30/1992 FY94: \$0 TOTAL: \$241,150
Prin. Invest. *NASA Tech. Officer* *CASE Category*
HARSHVARDHAN GSFC/R S FRASER 31-Atmos Sci

NAG 8-1031 **Purdue University** **4074**
RAINFALL RATE AND VERTICAL DISTRIBUTION OF DIABATIC
HEATING COMPONENTS OVER TROPICAL OCEANS
Period *Obligations*
08/20/1993-08/31/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D G VINCENT MSFC/J W KAUFMAN 31-Atmos Sci

NAG 5-2391 **Purdue University** **4067**
PSR 0656 + 14: A COOLING NEUTRON STAR
Period *Obligations*
10/13/1993-10/14/1995 FY94: \$35,060 TOTAL: \$35,060
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J P FINLEY GSFC/R OLIVERSEN 11-Astronomy

NAG 9-580 **Purdue University** **4075**
NATIONAL FACILITY FOR ACCELERATOR MASS SPECTROMETR Y
IN SUPPORT OF RESEARCH IN THE PLANETARY MATERIA
Period *Obligations*
04/02/1992-03/01/1994 FY94: \$0 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M E LIPSCHUTZ JSC/I D BROWNE 19-Phys Sci, NEC

NAG 5-2492 **Purdue University** **4068**
OBSERVATIONS OF PULSATING EARLY B STARS: A SEARCH FOR
X-RAY VARIABILITY
Period *Obligations*
02/03/1994-08/14/1995 FY94: \$32,300 TOTAL: \$32,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J P FINLEY GSFC/R PETRE 11-Astronomy

NAGW 925 **Purdue University** **4076**
EARTH OBSERVATION
Period *Obligations*
08/01/1986-05/31/1994 FY94: \$0 TOTAL: \$1,786,688
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C J JOHANNSEN HQ/A J TUYAHOV 39-Env Sci, NEC
D A LANDGREBE HQ/J E ESTES

NAG 8-220 **Purdue University** **4069**
MULTIOBJECTIVE SPACECRAFT CONTROL DESIGN
Period *Obligations*
04/03/1992-04/02/1994 FY94: \$0 TOTAL: \$64,710
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E SKELTON MSFC/M L BUTLER 49-Engr, NEC
MSFC/A P BUKLEY

NAGW 1472 **Purdue University** **4077**
APPLYING REMOTE SENSING AND GIS TECHNIQUES
Period *Obligations*
09/29/1988-09/30/1992 FY94: \$0 TOTAL: \$430,294
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C J JOHANNSEN HQ/W HUNTRESS 39-Env Sci, NEC
M F BAUMGARDNER

NAG 8-836 **Purdue University** **4070**
OBSERVATIONAL AND MELLING STUDIES OF HEAT MOISTURE
PRECIPITATION AND GLOBAL-SCALE CIRCULATION PATTERN
Period *Obligations*
07/20/1990-01/19/1994 FY94: \$0 TOTAL: \$294,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D G VINCENT MSFC/J W KAUFMAN 31-Atmos Sci

NAGW 2329 **Purdue University** **4078**
BIOMASS PRODUCTIVITY AND SUSTAINABILITY OF BIOREGE
NERATIVE LIFE SUPPORT SYSTEMS
Period *Obligations*
04/11/1991-11/14/1994 FY94: \$1,030,000 TOTAL: \$3,984,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C A MITCHELL HQ/R J WHITE 59-Life Sci, NEC

NAG 8-915 **Purdue University** **4071**
CYCLONIC AND ANTICYCLONIC CIRCULATION SYSTEMS
Period *Obligations*
07/02/1992-06/30/1995 FY94: \$75,000 TOTAL: \$250,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J SMITH MSFC/J W KAUFMAN 31-Atmos Sci

NAGW 2984 **Purdue University** **4079**
SSM/I OCEANIC RAINFALL VARIABILITY STUDIES
Period *Obligations*
03/20/1992-03/31/1995 FY94: \$0 TOTAL: \$90,548
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G W PETTY HQ/J C DODGE 31-Atmos Sci
HQ/R A SCHIFFER

NAG 8-918 **Purdue University** **4072**
SATELLITE MICROWAVE STUDIES OF EXPLOSIVE CYCLO- GENESIS
Period *Obligations*
07/06/1992-04/30/1995 FY94: \$54,999 TOTAL: \$165,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G W PETTY MSFC/W M LAPENTA 31-Atmos Sci

NAGW 3019 **Purdue University** **4080**
LABORATORY STUDIES OF C4H2 AND NITRILE PHOTOCHEMIS TRY
Period *Obligations*
03/20/1992-02/28/1995 FY94: \$50,000 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T S ZWIER HQ/H C BRINTON 11-Astronomy

NAG 8-930 **Purdue University** **4073**
HUBBLE CONTROL REDESIGN
Period *Obligations*
07/23/1992-07/31/1993 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E SKELTON MSFC/A P BUKLEY 49-Engr, NEC
K LIU MSFC/M L BUTLER

NAGW 3150 **Purdue University** **4081**
NAGW-3150/PURDUE UNIV/THE ANALYSIS OF GLOBAL CLOUD AND
RADIATION DATA FOR THE STUDY OF CLOUD-CLIMAT
Period *Obligations*
08/10/1992-12/31/1994 FY94: \$90,000 TOTAL: \$236,405
Prin. Invest. *NASA Tech. Officer* *CASE Category*
HARSHVARDHAN HQ/J C DODGE 31-Atmos Sci
HQ/R A SCHIFFER

**NASA'S UNIVERSITY PROGRAM
INDIANA (Continued)**

NAGW 3396 **Purdue University** **4082**
CHEMICAL STUDIES OF METEORITES
Period *Obligations*
03/09/1993-02/28/1995 FY94: \$70,000 TOTAL: \$122,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M E LIPSCHUTZ HQ/H C BRINTON 11-Astronomy

NAS 1-20270 **Purdue University** **4090**
BOUNDARY LAYER CONTROL WINGS
Period *Obligations*
08/15/1994-02/14/1995 FY94: \$99,817 TOTAL: \$99,817
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R SULLIVAN LARC/H D FUHRMAN 41-Aero Engr

NAGW 3460 **Purdue University** **4083**
NATIONAL FACILITY FOR ACCELERATOR MASS SPECTROMETR Y
Period *Obligations*
03/15/1993-09/30/1994 FY94: \$0 TOTAL: \$115,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M LIPSCHUTZ HQ/J BOYCE 32-Geological Sci

NAS 3-26940 **Purdue University** **4091**
MEASUREMENT OF GRAPHITE FIBER REINFORCED MATRIX CO
MPOSITES
Period *Obligations*
05/18/1993-05/17/1995 FY94: TOTAL: \$18,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R TAYLOR LERC/D ELLIS 47-Materials Engr
LERC/S M VINCENT

NAGW 3843 **Purdue University** **4084**
PURDUE UNI. RES. FOUND./ BIOPHYSICAL EVENTS DURING
TRANSDUCTION OF MECH. STRESS SIGNALS BY PLANTS
Period *Obligations*
01/11/1994-09/30/1994 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MITCHELL HQ/T W HALSTEAD 51-Biological Sci

NAS 5-31712 **Purdue University** **4092**
EOS INVESTIGATION HIRIS PROCESSING AND ANALYSIS
RESEARCH
Period *Obligations*
01/21/1992-12/14/2001 FY94: \$15,000 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A LANDGREBE GSFC/H W BLODGET 31-Atmos Sci

NAGW 3862 **Purdue University** **4085**
TOWARD SOIL SPATIAL INFORMATION SYSTEMS FOR GLOBAL
MODELING AND ECOSYSTEM MANAGEMENT
Period *Obligations*
03/09/1994-12/31/1994 FY94: \$138,301 TOTAL: \$138,301
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M F BAUMGARDNER HQ/G H MUCKLOW 22-Computer Science
HQ/G ASRAR

NCA 2-751 **Purdue University** **4093**
ANALYSIS OF POLARIZED LIGHT FROM A SUNFLOWER CANOPY
USING MULTIBAND RADIOMETER DATA
Period *Obligations*
09/09/1992-09/30/1993 FY94: \$0 TOTAL: \$21,390
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L BIEHL ARC/V VANDERBILT 45-Elec Engr

NAGW 3924 **Purdue University** **4086**
RESEARCH ON METHODS FOR ANALYSIS OF MULTISPECTRAL
EARTH OBSERVATIONAL DATA
Period *Obligations*
04/14/1994-01/31/1995 FY94: \$102,475 TOTAL: \$102,475
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D LANDGREBE HQ/D E WICKLAND 39-Env Sci, NEC
HQ/A C JANETOS

NCC 2-5038 **Purdue University** **4094**
CONVERSION OF SUNFLOWER MULTIBAND RADIOMETER POLAR
IZATION MEASUREMENTS TO POLARIZATION PARAMETERS
Period *Obligations*
02/25/1994-02/28/1995 FY94: \$39,314 TOTAL: \$39,314
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L L BIEHL ARC/V C VANDERBILT 39-Env Sci, NEC

NAGW 3944 **Purdue University** **4087**
PASSIVE MICROWAVE ALGORITHM DEVELOPMENT AND EVALUA
TION
Period *Obligations*
04/20/1994-03/31/1997 FY94: \$83,479 TOTAL: \$83,479
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G W PETTY HQ/J C DODGE 31-Atmos Sci
HQ/R A SCHIFFER

NCC 3-246 **Purdue University** **4095**
CHARACTERIZATION OF ORGANOCOPPERINDUM AND
ORGANOCOPPE RAGALLIUM COMPOUNDS BY X-RAY
CRYSTALLOGRAPHY
Period *Obligations*
03/02/1992-02/11/1994 FY94: \$0 TOTAL: \$7,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P E FANWICK LERC/A F HEPP 12-Chemistry

NAG10-93 **Purdue University** **4088**
BIOPHEPICAL EVENTS DURING EARLY TRANSDUCTION OF
MECHANICAL STRESS SIGNALS BY PLANTS
Period *Obligations*
09/11/1991-09/30/1993 FY94: TOTAL: \$119,769
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C A MITCHELL KSC/W M KNOTT 51-Biological Sci

NGT 00-010-004 **Purdue University** **4096**
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP P
ROGRAM
Period *Obligations*
10/13/1993-08/31/1994 FY94: \$49,940 TOTAL: \$49,940
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A WEISSHAAR HQ/G S SEIDEL 41-Aero Engr
HQ/J R FACEY

NAG10-112 **Purdue University** **4089**
BIOPHICAL EVENTS DURING EARLY TRANSDUCTION OF
MECHANICAL STRESS SIGNALS BY PLANTS
Period *Obligations*
08/07/1992-02/28/1995 FY94: \$53,977 TOTAL: \$80,286
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M OKOS KSC/W M KNOTT 51-Biological Sci

NGT 00-040-025 **Purdue University** **4097**
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRA M
Period *Obligations*
04/25/1991-02/28/1995 FY94: \$150,000 TOTAL: \$602,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A F GRANDT HQ/E T SCHWARTZ 99-Multi-Discip

**NASA'S UNIVERSITY PROGRAM
INDIANA (Continued)**

NGT 00-050-621 Purdue University 4098
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
A ELMAGARMID HQ/J ALEXANDER 22-Computer Science

NGT 00-050-634 Purdue University 4099
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/01/1990-08/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
C P KUBIAK HQ/F C OWENS 12-Chemistry

NGT 00-050-708 Purdue University 4100
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/10/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
E N HOUSTIS HQ/F C OWENS 22-Computer Science

NGT 00-050-711 Purdue University 4101
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1991-10/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
J S BOLTON HQ/F C OWENS 46-Mech Engr

NGT 00-050-717 Purdue University 4102
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/10/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
B HILLBERRY HQ/F C OWENS 46-Mech Engr

NGT 00-050-779 Purdue University 4103
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/25/1991-06/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
B BHARGAVA HQ/F C OWENS 22-Computer Science

NGT 00-050-867 Purdue University 4104
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
03/03/1992-12/14/1994 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
J L GRAY LERC/F MONTEGANI 45-Elec Engr

NGT 00-050-919 Purdue University 4105
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/21/1992-08/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest NASA Tech. Officer CASE Category
E H SPAFFORD HQ/J ALEXANDER 22-Computer Science

NGT 00-050-937 Purdue University 4106
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/28/1992-07/31/1994 FY94: \$0 TOTAL: \$29,500
Prin. Invest NASA Tech. Officer CASE Category
T J MOFFETT GSFC/G SOFFEN 13-Physics

NGT 00-050-961 Purdue University 4107
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/22/1992-08/14/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
H J SIEGEL HQ/J K ALEXANDER 45-Elec Engr

NGT 00-050-963 Purdue University 4108
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1992-12/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
HARSHVARDHAN GSFC/G SOFFEN 11-Astronomy

NGT 00-051-077 Purdue University 4109
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
G W PETTY HQ/G LESANE 31-Atmos Sci

NGT 00-051-129 Purdue University 4110
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/14/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
J M LONGUSKI JPL/C HIX 41-Aero Engr

NGT 00-051-284 Purdue University 4111
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest NASA Tech. Officer CASE Category
B BHARGAVA HQ/D HOLLAND 22-Computer Science

NGT 00-070-139 Purdue University 4112
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
08/15/1989-06/30/1993 FY94: \$0 TOTAL: \$62,000
Prin. Invest NASA Tech. Officer CASE Category
E R GRANT HQ/F C OWENS 12-Chemistry

NGT 00-070-279 Purdue University 4113
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
07/13/1992-07/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
S FLEETER LERC/F MONTEGANI 46-Mech Engr

NGT 00-070-313 Purdue University 4114
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
06/29/1993-05/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
R SKELTON HQ/D K RUSSELL 41-Aero Engr

NGT 00-090-138 Purdue University 4115
GSRP/UMF
Period Obligations
09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest NASA Tech. Officer CASE Category
M MARTINEZ HQ/D K RUSSELL 99-Multi-Discip

NASA'S UNIVERSITY PROGRAM **INDIANA (Continued)**

NAG 3-1300 **Rose-Hulman Institute of Technology** **4116**
CONTOURING OF A FREE-SURFACE OF OIL
Period *Obligations*
10/16/1991-05/31/1993 FY94: \$0 TOTAL: \$126,604
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H P STAHL LERC/A D PLINE 13-Physics

NAG 5-2176 **Rose-Hulman Institute of Technology** **4117**
CHARACTERIZATION OF INFRARED DETECTORS
Period *Obligations*
01/11/1993-01/14/1994 FY94: \$0 TOTAL: \$17,491
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R WAITE GSFC/D GLENAR 11-Astronomy

NCC 3-200 **Saint Marys College** **4118**
HIGH TEMPERATURE CERAMIC FLASH SENSOR INTERFACE STUDIES / 2510
Period *Obligations*
01/22/1991-09/13/1993 FY94: \$0 TOTAL: \$27,499
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J J BELLINA LERC/M V ZELLER 13-Physics
LERC/W D WILLIAMS

NAG 3-746 **University of Evansville** **4119**
KINETIC THEORY MODEL FOR THE FLOW OF A SIMPLE GAS THRU AND FROM A TWO-DIMENSIONAL NOZZLE
Period *Obligations*
09/30/1986-08/31/1993 FY94: TOTAL: \$114,089
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B RILEY LERC/R R TACINA 42-Astro Engr
LERC/E P BRAUNSCHEIDEL

NAG 1-1561 **University of Notre Dame** **4120**
MULTIDISCIPLINARY DESIGN TECHNOLOGY DEVELOPMENT: A COMPARATIVE INVESTIGATION OF INTEGRATED AEROSPACE
Period *Obligations*
12/20/1993-12/31/1994 FY94: \$196,084 TOTAL: \$196,084
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E RENAUD LARC/J SORIESKI 41-Aero Engr
S M BATILL LARC/L L GREEN
J B BROCKMAN

NAG 2-905 **University of Notre Dame** **4121**
AN EXPERIMENTAL INVESTIGATION OF THE FLOW FIELD PHYSICS OF HIGH-LIFT SYSTEMS
Period *Obligations*
05/31/1994-03/31/1995 FY94: \$56,734 TOTAL: \$56,734
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C NELSON ARC/L L ERICKSON 41-Aero Engr
F O THOMAS

NAG 3-732 **University of Notre Dame** **4122**
EFFECTS OF NONUNIFORM FLOWS ON THE AERODYNAMICS AND NOISE RADIATION OF ADVANCED TURBOPROPS
Period *Obligations*
05/27/1986-01/31/1995 FY94: \$117,657 TOTAL: \$648,741
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H M ATASSI LERC/J F GROENEWEG 41-Aero Engr

NAG 3-1335 **University of Notre Dame** **4123**
ANALYSIS OF THERMODYNAMICS AND FLUID MECHANICS OF PYROTECH MATERIALS WITH APPL TO THE NASA STAND INIT
Period *Obligations*
03/11/1992-04/19/1995 FY94: \$0 TOTAL: \$94,516
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M POWERS LERC/R M STUBBS 42-Astro Engr

NAG 3-1398 **University of Notre Dame** **4124**
STUDY OF DISTURBANCES IN FLUID-FLUID FLOWS IN OPEN AND CLOSED SYSTEMS
Period *Obligations*
12/01/1992-12/01/1994 FY94: \$100,000 TOTAL: \$199,687
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J MCCREADY LERC/J B MCQUILLEN 49-Engr, NEC
H C CHANG
D T LEIGHTON

NAG 3-1549 **University of Notre Dame** **4125**
INTEGRATED SYSTEM DESIGN FOR THE TRANSMISSION OF IMAGE DATA OVER LOW BIT RATE NOISY CHANNELS
Period *Obligations*
11/30/1993-12/31/1994 FY94: \$50,795 TOTAL: \$50,795
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J COSTELLO LERC/R L BEXTEN 45-Elec Engr
Y F HUANG
R L STEVENSON

NAG 3-1644 **University of Notre Dame** **4126**
COLLID PHYSICS IN MICROGRAVITY
Period *Obligations*
07/11/1994-07/10/1995 FY94: \$129,000 TOTAL: \$129,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A VARMA LERC/K A WHITE 47-Materials Engr
P J MCGINN

NAG 5-557 **University of Notre Dame** **4127**
ERROR CONTROL TECHNIQUES FOR SATELLITE AND SPACE COMMUNICATIONS
Period *Obligations*
06/01/1985-02/28/1995 FY94: \$67,000 TOTAL: \$561,820
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D COSTELLO GSFC/W H MILLER 49-Engr, NEC
GSFC/J C MORAKIS

NAG 8-1064 **University of Notre Dame** **4128**
Y2BACUO2 SEGREGATION IN YBA2CU307-X DURING MELT TEXTURING
Period *Obligations*
06/14/1994-06/13/1995 FY94: \$47,245 TOTAL: \$47,245
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J MCGINN MSFC/E C ETHRIDGE 47-Materials Engr

NAG 8-1080 **University of Notre Dame** **4129**
OSCILLATORY CROSS-FLOW ELECTROPHORESIS
Period *Obligations*
09/01/1994-08/31/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D T LEIGHTON MSFC/T Y MILLER 12-Chemistry

NAGW 3433 **University of Notre Dame** **4130**
RELATIVE ABUNDANCE OF ICES IN DISKS OF TAURI STARS
Period *Obligations*
03/03/1993-02/28/1995 FY94: \$15,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S C TEGLER HQ/J A NUTH 19-Phys Sci, NEC

NCA 2-621 **University of Notre Dame** **4131**
STATIC AND DYNAMIC CONTROL OF FOREBODY/WING VORTICAL INTERACTIONS
Period *Obligations*
06/18/1991-09/30/1993 FY94: \$0 TOTAL: \$68,637
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A S ARENA ARC/L B SCHIFF 41-Aero Engr
R C NELSON

NASA'S UNIVERSITY PROGRAM **INDIANA (Continued)**

NCA 2-711 University of Notre Dame 4132
TRANSONIC FLOW VISUALIZATION STUDY OF A FLUTTER EXCITER
Period *Obligations*
04/17/1992-09/30/1992 FY94: TOTAL: \$17,766
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P F DUNN ARC/L VERNON 41-Aero Engr
F O THOMAS

NCA 2-730 University of Notre Dame 4133
STATIC AND DYNAMIC AERODYNAMIC CHARACTERISTICS OF A SUBSCALE X-31 MODEL
Period *Obligations*
07/14/1992-11/30/1994 FY94: \$0 TOTAL: \$79,912
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C NELSON ARC/D FISHER 41-Aero Engr

NCA 2-753 University of Notre Dame 4134
INVESTIGATION AND APPLICATION OF TIME DOMAIN PARAMETER IDENTIFICATION
Period *Obligations*
10/23/1992-04/30/1995 FY94: \$36,517 TOTAL: \$72,961
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M BATILL ARC/L VERNON 41-Aero Engr

NCA 2-770 University of Notre Dame 4135
MEASUREMENT OF FLUTTER EXCITER RESPONSE TO IMPOSED STOCHASTIC FORCING IN TRANSONIC FLOW
Period *Obligations*
12/02/1992-09/30/1993 FY94: \$0 TOTAL: \$31,393
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P F DUNN ARC/L VERNON 41-Aero Engr
F O THOMAS

NCC 1-177 University of Notre Dame 4136
WIND TUNNEL DATA SYSTEM ACCURACY ASSESSMENT
Period *Obligations*
05/25/1993-03/31/1994 FY94: \$10,633 TOTAL: \$40,633
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S M BATILL LARC/L E PUTNAM 41-Aero Engr
LARC/D E FULLER

NCC 2-5056 University of Notre Dame 4137
AN EXPERIMENTAL STUDY OF VORTICILATION
Period *Obligations*
05/19/1994-06/30/1995 FY94: \$39,599 TOTAL: \$39,599
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C NELSON ARC/D F FISHER 41-Aero Engr

NCC 3-325 University of Notre Dame 4138
ANALYSIS OF FLUID-SOLID RESPONSES IN PARTIALLY CONFINED DETONATIONS
Period *Obligations*
09/14/1993-09/12/1995 FY94: \$0 TOTAL: \$32,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M POWERS LERC/R M STUBBS 42-Astro Engr

NGT 00-030-250 University of Notre Dame 4139
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/22/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G CARLTON HQ/A C JANETOS 39-Env Sci, NEC
HQ/G ASRAR

NAG 5-1223 Valparaiso University 4140
ADP INFRARED STUDY OF TRANSITION LATE ASYMPTOTIC GIANT
Period *Obligations*
07/27/1989-09/30/1995 FY94: \$34,000 TOTAL: \$124,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J HRIVNAK GSFC/D WEST 11-Astronomy

NAG 5-2645 Valparaiso University 4141
UV CHROMOSPHERIC ACTIVITY IN COOL, SHORT-PERIOD CONTACT BINARIES
Period *Obligations*
07/12/1994-08/31/1995 FY94: \$7,300 TOTAL: \$7,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J HRIVNAK GSFC/D WEST 11-Astronomy

NAG 8-232 Valparaiso University 4142
JOVE
Period *Obligations*
03/17/1992-07/28/1994 FY94: \$0 TOTAL: \$88,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J HRIVNAK MSFC/F SIX 11-Astronomy
J CARISTI

IOWA

NAG 8-264 Drake University 4143
JOVE
Period *Obligations*
12/08/1992-05/31/1995 FY94: \$28,250 TOTAL: \$87,250
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A MARSTON MSFC/F SIX 99-Multi-Discip
K KOPECKY

NAG 1-1129 Iowa State University 4144
PROTOTYPE EDDY CURRENT SSME HEAT EXCHANGER TUBING INSPECTION SYSTEM
Period *Obligations*
04/04/1990-09/30/1993 FY94: \$1 TOTAL: \$200,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W L LORD LARC/M NAMKUNG 45-Elec Engr

NAG 1-1255 Iowa State University 4145
TRAJECTORY OPTIMIZATION FOR THE NATIONAL AEROSPACE PLANE
Period *Obligations*
05/06/1991-05/31/1993 FY94: \$1 TOTAL: \$58,235
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D LU LARC/D D MOERDER 42-Astro Engr
LARC/W T SUIT

NAG 1-1304 Iowa State University 4146
OPTIMAL GUIDANCE AND MISSION DESIGN FOR EARTH-MARS AEROCAPTURE
Period *Obligations*
07/12/1991-10/31/1994 FY94: \$33,275 TOTAL: \$165,366
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B L PIERSON LARC/W T SUIT 42-Astro Engr
LARC/D D MOERDER

NASA'S UNIVERSITY PROGRAM
IOWA (Continued)

NAG 2-151 Iowa State University 4147
PROPERTY DELEGATED
Period *Obligations*
01/01/1982-12/31/1993 FY94: \$0 TOTAL: \$186,043
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D IVERSON ARC/B F SMITH 19-Phys Sci, NEC
ARC/J B POLLACK

NAG 2-715 Iowa State University 4148
DENSE GAS AERODYNAMIC STUDIES IN A SHOCK TUBE
Period *Obligations*
06/26/1991-12/31/1993 FY94: \$0 TOTAL: \$194,930
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W J COOK ARC/D J KOGA 41-Aero Engr

NAG 2-776 Iowa State University 4149
NUMERICAL COMPUTATION OF THE CHEMICALLY REACTING FLOW
AROUND THE NATIONAL AEROSPACE PLANE
Period *Obligations*
04/02/1992-01/31/1995 FY94: \$55,000 TOTAL: \$172,220
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C TANNEHILL ARC/T A EDWARDS 41-Aero Engr
ARC/S L LAWRENCE

NAG 2-885 Iowa State University 4150
SPACE LIFE-SUPPORT ENGINEERING PROGRAM
Period *Obligations*
02/28/1994-10/31/1994 FY94: \$112,315 TOTAL: \$112,315
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C SEAGRAVE ARC/E L PORCE 19-Phys Sci, NEC
ARC/J E FINN

NAG 2-909 Iowa State University 4151
STATISTICAL SENSOR VALIDATION IN LIFE SUPPORT SYSTEMS
Period *Obligations*
06/21/1994-12/31/1994 FY94: \$74,160 TOTAL: \$74,160
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D K ROLLINS ARC/C K FINN 43-Chem Engr
ARC/H W JONES

NAG 3-1075 Iowa State University 4152
ANALYSIS OF SUPERSONIC THROUGHFLOW FAN PHENOMENA
Period *Obligations*
09/22/1989-09/30/1993 FY94: TOTAL: \$53,845
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T H OKIISHI LERC/L REID 41-Aero Engr

NAG 3-1302 Iowa State University 4153
COMPARISON OF SLOW- AND FAST-RESPONSE INST FLOW FIELD
MEAS IN A TRANSONIC AXIAL-FLOW COMPRESSOR STAGE
Period *Obligations*
10/30/1991-02/17/1995 FY94: \$50,607 TOTAL: \$138,377
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T H OKIISHI LERC/K L SUDER 41-Aero Engr

NAG 3-1318 Iowa State University 4154
ALGORITHMS FOR NON-UNIFORM RATIONAL B-SPLINE SURFACE
MODEL DEVELOPMENT
Period *Obligations*
01/27/1992-11/08/1994 FY94: \$53,221 TOTAL: \$160,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J H OLIVER LERC/D P MILLER 46-Mech Engr
LERC/A L EVANS

NAG 3-1322 Iowa State University 4155
EXTRACTION OF ELASTIC CONSTANTS FROM ACOUSTO-ULTRASONIC
SIGNALS IN THICK SECTION COMPOSITES
Period *Obligations*
01/27/1992-10/31/1994 FY94: \$0 TOTAL: \$37,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D K HSU LERC/A VARY 47-Materials Engr
LERC/H E KAUTZ

NAG 3-1427 Iowa State University 4156
LOW-SPEED, MULTISTAGE, AXIAL-FLOW COMPRESSOR FLOW FIELD
MEASUREMENTS
Period *Obligations*
12/30/1992-03/02/1995 FY94: \$56,029 TOTAL: \$111,096
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T H OKIISHI LERC/M D HATHAWAY 41-Aero Engr

NAG 3-1481 Iowa State University 4157
NURBS-BASED GEOMETRY FOR INTEGRATED STRUCTURAL ANALYSIS
Period *Obligations*
04/16/1993-04/12/1995 FY94: \$32,551 TOTAL: \$57,735
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J H OLIVER LERC/S A THORP 46-Mech Engr
LERC/A L EVANS

NAG 3-1561 Iowa State University 4158
AERODYNAMIC MEASUREMENTS OF THE FLOW THROUGH A SUBSONIC
INLET DUCT
Period *Obligations*
01/04/1994-01/05/1995 FY94: \$42,359 TOTAL: \$42,359
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T H OKIISHI LERC/B A REICHERT 41-Aero Engr

NAG 5-355 Iowa State University 4159
DIAGNOSTIC ANALYSIS OF DIABATIC HEATING AND MAINTENANCE
OF THE THERMAL FIELD IN THE SOUTHERN HEMISPHERE
Period *Obligations*
08/01/1983-12/31/1994 FY94: \$0 TOTAL: \$514,140
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T C CHEN GSFC/J W PFAENDTNER 31-Atmos Sci

NAG 5-707 Iowa State University 4160
OBSERVATIONS OF THE BRIGHTEST NORMAL M-TYPE MICELAR
VARIABLES
Period *Obligations*
09/01/1985-01/31/1995 FY94: \$24,500 TOTAL: \$224,447
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A WILLSON GSFC/Y KONDO 11-Astronomy
E BRUGEL
N EVANS

NAG 5-1519 Iowa State University 4161
DATA VALIDATION FOR TOTAL OZONE MAPPING SPECTROMETER
FOR SMALL-CLASS EXPLORER
Period *Obligations*
04/02/1991-05/14/1995 FY94: \$61,674 TOTAL: \$218,417
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L STANFORD GSFC/A J KRUEGER 31-Atmos Sci
GSFC/M R SCHOEBERL

NASA'S UNIVERSITY PROGRAM

IOWA (Continued)

NAG 5-1655 Iowa State University 4162
 THE FORMATION PROCESS OF THE HE I LAMBDAL0830 LINE IN COOL GIANT STARS
Period *Obligations*
 06/24/1991-06/30/1993 FY94: \$0 TOTAL: \$9,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D G LUTTERMOSER GSFC/R PETRE 11-Astronomy

NAG 5-2047 Iowa State University 4163
 CORRELATED OBSERVATIONS OF SUPERLUMINAL QUASARS
Period *Obligations*
 07/22/1992-03/31/1995 FY94: \$70,139 TOTAL: \$133,137
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R C LAMB GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NAG 5-2286 Iowa State University 4164
 HIGH PERFORMANCE MORPHOLOGICAL FILTERING OF CIRRUSS EMISSION FORM INFRARED IMAGES
Period *Obligations*
 06/16/1993-02/28/1995 FY94: \$25,880 TOTAL: \$53,609
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P N APPLETON GSFC/J A PEDELTY 11-Astronomy

NAG 5-2385 Iowa State University 4165
 ACCRETION INDUCED STARBURST ACTIVITY IN INERACTING GALAXIES: MAPPING SUSPECTED OUTFLOWS IN ARP 283.
Period *Obligations*
 10/06/1993-10/14/1994 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P N APPLETON GSFC/R PETRE 11-Astronomy

NAG 5-2491 Iowa State University 4166
 A MASSIVELY PARALLEL GLOBAL MESOSCALE MODEL WITH IMPROVED SURFACE-LAYER COUPLING
Period *Obligations*
 02/04/1994-02/14/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E S TAKLE GSFC/J R FISCHER 22-Computer Science
 J L GUSTAFSON

NAG 8-963 Iowa State University 4167
 MICROSTRUCTURAL DEVELOPMENT
Period *Obligations*
 06/23/1993-06/30/1995 FY94: \$100,000 TOTAL: \$200,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T A LOGRASSO MSFC/S D COBB 19-Phys Sci, NEC

NAGW 1364 Iowa State University 4168
 MECHANISMS AND IMPLICATION OF MASS LOSS ASSOCIATED
Period *Obligations*
 07/26/1988-12/31/1994 FY94: \$0 TOTAL: \$384,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L A WILLSON HQ/G C CLAYTON 13-Physics
 HQ/W V JONES

NAGW 2582 Iowa State University 4169
 NAGW-2582/IOWA STATE UNIV/ANALYSIS OF STRATOSPHERIC TRACE GAS SATELLITE MEASUREMENTS
Period *Obligations*
 07/25/1991-03/31/1995 FY94: \$25,182 TOTAL: \$197,918
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J L STANFORD HQ/J A KAYE 31-Atmos Sci
 HQ/R E MURPHY

NAGW 2993 Iowa State University 4170
 SYNOPTIC CLIMATOLOGY OF SPACE BASED WATER VAPOR MEASUREMENTS
Period *Obligations*
 03/24/1992-09/01/1994 FY94: \$0 TOTAL: \$133,643
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W J GUTOWSKI HQ/J C DODGE 31-Atmos Sci
 HQ/R A SCHIFFER

NAGW 4060 Iowa State University 4171
 NUMERICAL MODEL STUDIES
Period *Obligations*
 06/24/1994-03/31/1995 FY94: \$78,382 TOTAL: \$78,382
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M SEGAL HQ/J BERGSTRALH 19-Phys Sci, NEC

NGT 00-03Q-008 Iowa State University 4172
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 11/19/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R W TURNER HQ/G ASRAR 39-Env Sci, NEC

NGT 00-04Q-018 Iowa State University 4173
 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
 03/14/1990-01/31/1995 FY94: \$345,000 TOTAL: \$1,638,925
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W W SANDERS HQ/E SCHWARTZ 99-Multi-Discip

NGT 00-05Q-633 Iowa State University 4174
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 08/30/1990-01/31/1995 FY94: \$22,000 TOTAL: \$88,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R H FLETCHER HQ/F C OWENS 46-Mech Engr

NGT 00-05Q-637 Iowa State University 4175
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 09/21/1990-06/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B L PIERSON HQ/F C OWENS 41-Aero Engr

NGT 00-05Q-757 Iowa State University 4176
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 10/23/1991-06/30/1995 FY94: \$0 TOTAL: \$64,740
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T C CHEN HQ/J ALEXANDER 31-Atmos Sci
 W J GUTOWSKI

NGT 00-05Q-882 Iowa State University 4177
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 05/06/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A FLATAU MSFC/F SIX 46-Mech Engr

NGT 00-05Q-949 Iowa State University 4178
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 08/04/1992-08/23/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R H PLETCHER LERC/F MONTEGANI 46-Mech Engr

NASA'S UNIVERSITY PROGRAM
IOWA (Continued)

NGT 00-050-991 Iowa State University 4179
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/11/1992-07/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W LORD LARC/E PRIOR 45-Elec Engr

NGT 00-051-009 Iowa State University 4180
NGT-51009/IOWA STATE UNIV/GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/16/1992-07/31/1994 FY94: \$16,351 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A ROTHMAYER LARC/E PRIOR 41-Aero Engr

NGT 00-051-020 Iowa State University 4181
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/14/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J P BASART GSFC/G SOFFEN 45-Elec Engr

NGT 00-051-205 Iowa State University 4182
GRAD STUDENT RESEARCHERS PROGRAM
Period *Obligations*
04/25/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E BERNARD MSFC/F SIX 46-Mech Engr

NGT 00-051-254 Iowa State University 4183
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A FLATAU LARC/L EVANS 46-Mech Engr

NGT 00-070-305 Iowa State University 4184
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
05/20/1993-05/31/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P LU HQ/D K RUSSELL 41-Aero Engr

NGT 00-070-347 Iowa State University 4185
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
08/12/1993-08/15/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B PIERSON HQ/D K RUSSELL 41-Aero Engr

NGT 00-090-123 Iowa State University 4186
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/26/1992-08/14/1993 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A CAMPBELL HQ/D K RUSSELL 99-Multi-Discip

NAG 2-571 University of Iowa 4187
CONTINUING ANALYSIS AND INTERPRETATION OF DATA FROM PIONEER 10 AND PIONEER 11
Period *Obligations*
05/23/1989-07/31/1995 FY94: \$165,941 TOTAL: \$851,065
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A VAN ALLEN ARC/L E LASHER 11-Astronomy
ARC/R O FIMMEL

NAG 3-1580 University of Iowa 4188
PROPOSAL TO STUDY THE SCIENTIFIC USES OF SOLAR ELECTRON PROPUSION FOR SPACE PHYSICS MISSIONS
Period *Obligations*
04/01/1994-04/30/1995 FY94: \$9,872 TOTAL: \$9,872
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W S KURTH LERC/J M HICKMAN 19-Phys Sci, NEC

NAG 3-1592 University of Iowa 4189
BUOYANCY EFFECTS ON THE STRUCTURE AND STABILITY OF BURKE - SCHUMANN DIFFUSION FLAME
Period *Obligations*
06/02/1994-06/01/1996 FY94: \$88,663 TOTAL: \$88,663
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L D CHEN LERC/D STOCKER 46-Mech Engr

NAG 5-295 University of Iowa 4190
MEASUREMENT OF LOW ENERGY ELECTRONS AND PROTONS IN THE EARTHS MAGNETOSPHERE AND THE INTERPLANETARY M
Period *Obligations*
02/01/1983-01/31/1995 FY94: \$50,000 TOTAL: \$682,003
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A FRANK GSFC/G BULLOCK 11-Astronomy

NAG 5-310 University of Iowa 4191
RESEARCH RELATIVE TO THE DYNAMICS EXPLORE PLOSMOTE ONE INSTRUMENT EXPERIMENT
Period *Obligations*
04/15/1983-06/30/1994 FY94: \$0 TOTAL: \$2,758,649
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A GURNETT GSFC/G D BULLOCK 19-Phys Sci, NEC
GSFC/R A HOFFMAN

NAG 5-483 University of Iowa 4192
GLOBOL AURORA IMAGING
Period *Obligations*
11/01/1984-01/31/1993 FY94: \$0 TOTAL: \$3,624,815
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A FRANK GSFC/G D BULLOCK 19-Phys Sci, NEC
GSFC/R A HOFFMAN

NAG 5-1109 University of Iowa 4193
ISEE 1AND2 MAGNETOSPHERIC AND INTERPLANETARY PLASMA INSTRUMENTS
Period *Obligations*
11/01/1988-12/31/1993 FY94: \$0 TOTAL: \$650,680
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A FRANK GSFC/G BULLOCK 19-Phys Sci, NEC
C Y HUANG

NAG 5-1483 University of Iowa 4194
PHYSICS OF MAGNETOSPHERIC BOUNDARY LAYERS
Period *Obligations*
11/26/1990-05/31/1994 FY94: \$0 TOTAL: \$747,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I H CAIRNS GSFC/T J BIRMINGHAM 13-Physics

**NASA'S UNIVERSITY PROGRAM
IOWA (Continued)**

NAG 5-1543 **University of Iowa** **4195**
PLASMA SHEET DYNAMICS IN THE EARTH'S MAGNETOTAIL
(SUBSTORM TASK)
Period *Obligations*
04/17/1991-04/30/1994 FY94: \$0 TOTAL: \$190,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C HUANG GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-1926 **University of Iowa** **4196**
WAVES IN SPACE PLASMAS (WISP) CO-INVESTIGATOR GRAN T
Period *Obligations*
03/03/1992-03/14/1994 FY94: \$0 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W CALVERT GSFC/R F BENSON 19-Phys Sci, NEC

NAG 5-2084 **University of Iowa** **4197**
A STATISTICAL FRAMEWORK FOR UTILIZATION OF RADAR DA TA
IN TROPICAL RAINFALL MEASURING MISSION
Period *Obligations*
08/25/1992-06/30/1994 FY94: \$52,986 TOTAL: \$167,986
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W F KRAJEWSKI GSFC/O W THIELE 31-Atmos Sci
J A SMITH
V CHANDRASEKAR

NAG 5-2102 **University of Iowa** **4198**
COMPREHENSIVE ANALYSIS OF ELECTRON CONICAL DISTRIBUTIONS
FROM MULTI-SATELLITES DATABASES
Period *Obligations*
09/18/1992-04/30/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D MENIETTI GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-2231 **University of Iowa** **4199**
METHODOLOGY FOR 3D QUADRATURE OF GGS/HYDRA DATA IN
CLUDING CALIBRATION DATA, SPACECRAFT POTENTIAL.
Period *Obligations*
05/10/1993-07/14/1995 FY94: \$71,000 TOTAL: \$152,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D SCUDDER GSFC/M H ACUNA 13-Physics
GSFC/D N BAKER

NAG 5-2346 **University of Iowa** **4200**
GEOTAIL MCA PLASMA WAVE DATA ANALYSIS
Period *Obligations*
08/09/1993-08/14/1995 FY94: \$591,400 TOTAL: \$754,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R R ANDERSON GSFC/M ACONA 13-Physics

NAG 5-2371 **University of Iowa** **4201**
ANALYSIS OF PLASMA MEASUREMENTS FOR THE GEOTAIL MI
SSION
Period *Obligations*
09/21/1993-09/30/1995 FY94: \$1,239,734 TOTAL: \$1,239,734
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A FRANK GSFC/M H ACUNA 13-Physics

NAG 5-2422 **University of Iowa** **4202**
BATSE LONG-TERM MONITORING OF BRIGHT ACTIVE GALACT IC
NUCLEI
Period *Obligations*
11/06/1993-11/14/1994 FY94: \$55,000 TOTAL: \$55,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R EDELSON GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2521 **University of Iowa** **4203**
INTERNATIONAL AGN WATCH: CONTINUOUS MONITORING OF NGC
4151
Period *Obligations*
03/09/1994-03/14/1995 FY94: \$34,500 TOTAL: \$34,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R EDELSON GSFC/D WEST 11-Astronomy

NAG 5-2547 **University of Iowa** **4204**
MULTI-WAVEBAND SPECTRUM AND VARIABILITY OF NGC 415 1
Period *Obligations*
03/09/1994-03/14/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R EDELSON GSFC/N WHITE 11-Astronomy

NAG 5-2668 **University of Iowa** **4205**
A STUDY OF IRAS LRS OBSERVATIONS OF VARIABLE
CIRCUMSTELLAR SHELLS
Period *Obligations*
08/09/1994-08/14/1995 FY94: \$34,000 TOTAL: \$34,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D FIX GSFC/D WEST 11-Astronomy

NAG 5-2669 **University of Iowa** **4206**
ARCHIVING OF WIDEBAND PLASMA WAVE DATA
Period *Obligations*
08/01/1994-07/31/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W KURTH GSFC/G BULLOCK 11-Astronomy

NAG 5-5023 **University of Iowa** **4207**
OEDIPUS-C ROCKET STUDY OF WAVES IN THE IONOSPHERE
Period *Obligations*
05/23/1994-01/31/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W CALVERT GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 8-292 **University of Iowa** **4208**
PLASMA DUST CRYSTALLIZATION
Period *Obligations*
08/04/1993-08/01/1995 FY94: \$107,838 TOTAL: \$215,862
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J GOREE MSFC/D NOEVER 11-Astronomy

NAG 8-1030 **University of Iowa** **4209**
SIMULATION OF PLASMASPHERIC RADIO SOUNDING
Period *Obligations*
02/07/1994-12/08/1994 FY94: \$65,000 TOTAL: \$65,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W CALVERT MSFC/L JOHNSON 13-Physics

NAGW 1539 **University of Iowa** **4210**
STUDY OF PLASMA WAVES ASSOCIATED W/ SPACELAB 2
Period *Obligations*
12/06/1988-09/30/1993 FY94: \$0 TOTAL: \$93,310
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W S KURTH HQ/G K PARKS 13-Physics
HQ/T W PERRY

203

NASA'S UNIVERSITY PROGRAM **IOWA (Continued)**

NAS 5-30371 University of Iowa 4226
PLASMA WAVE INVESTIGATION PHASE C/D ISTP POLAR MISSION
Period Obligations
12/29/1988-06/30/1994 FY94: \$356,300 TOTAL: \$5,939,660
Prin. Invest. NASA Tech. Officer CASE Category
D A GURNETT GSFC/D CROSBY 13-Physics

NAS 5-30730 University of Iowa 4227
ISTP PROJECT'S WIDEBAND PLASMA WAVE INVESTIGATION
Period Obligations
01/30/1990-12/31/1997 FY94: \$375,946 TOTAL: \$3,722,433
Prin. Invest. NASA Tech. Officer CASE Category
D GURNETT GSFC/J L CHRISTENSEN 31-Atmos Sci

NCC 3-290 University of Iowa 4228
TRANSPORT PHENOMENA DURING EQUIAXED SOLIDIFICATION OF ALLOYS
Period Obligations
01/16/1993-01/07/1996 FY94: \$79,000 TOTAL: \$143,377
Prin. Invest. NASA Tech. Officer CASE Category
C BECKERMAN LERC/H C DEGROH 47-Materials Engr
H C DEGROH

NGT 00-030-030 University of Iowa 4229
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
11/02/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
Y SUNWOO HQ/G ASRAR 31-Atmos Sci

NGT 00-030-160 University of Iowa 4230
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/24/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
W F KRAJEWSKI HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-030-192 University of Iowa 4231
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/01/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
W F KRAJEWSKI HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-218 University of Iowa 4232
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/03/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
T F SMITH HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-050-362 University of Iowa 4233
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1988-03/31/1993 FY94: \$0 TOTAL: \$47,000
Prin. Invest. NASA Tech. Officer CASE Category
J ARORA HQ/F C OWENS 49-Engr, NEC

NGT 00-050-976 University of Iowa 4234
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/16/1992-07/31/1994 FY94: \$9,500 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
J S ARORA LARC/E PRIOR 46-Mech Engr

NGT 00-051-321 University of Iowa 4235
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
T RUS HQ/P SMITH 22-Computer Science

NGT 00-051-351 University of Iowa 4236
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1992-05/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
J A GOREE HQ/G A LESANE 13-Physics

NAG 8-265 University of Northern Iowa 4237
JOVE
Period Obligations
12/30/1992-05/31/1995 FY94: \$45,413 TOTAL: \$74,621
Prin. Invest. NASA Tech. Officer CASE Category
T A HOCKEY MSFC/F SIX 31-Atmos Sci
D J WIENS

KANSAS

NAG 8-215 Emporia State University 4238
JOVE
Period Obligations
01/28/1992-11/30/1994 FY94: \$0 TOTAL: \$88,400
Prin. Invest. NASA Tech. Officer CASE Category
J S ABER MSFC/F SIX 32-Geological Sci
J L BALLESTER

NAG 1-1503 Kansas State University 4239
CRACK GROWTH PREDICTION METHODOLOGY FOR MULTI-SITE DAMAGE: LAYERED ANALYSIS AND GROWTH NLPN 93-210
Period Obligations
04/12/1993-11/11/1994 FY94: \$58,000 TOTAL: \$73,000
Prin. Invest. NASA Tech. Officer CASE Category
D V SWENSON LARC/J C NEWMAN 46-Mech Engr
LARC/C E HARRIS

NAG 8-246 Kansas State University 4240
JOVE
Period Obligations
08/20/1992-07/30/1994 FY94: \$0 TOTAL: \$23,180
Prin. Invest. NASA Tech. Officer CASE Category
B S SPOONER MSFC/F SIX 51-Biological Sci

NAGW 1111 Kansas State University 4241
PHOTOLOGIC STUDY OF SELECTED FEATURES ON MARS
Period Obligations
06/01/1987-01/17/1995 FY94: \$0 TOTAL: \$407,111
Prin. Invest. NASA Tech. Officer CASE Category
J R UNDERWOOD HQ/D H SCOTT 32-Geological Sci
HQ/J M BOYCE

**NASA'S UNIVERSITY PROGRAM
KANSAS (Continued)**

NAGW 2328 Kansas State University 4242
THE CENTER FOR GRAVITATIONAL STUDIES IN CELLULAR AND DEVELOPMENTAL BIOLOGY
Period *Obligations*
02/12/1991-12/31/1994 FY94: \$996,000 TOTAL: \$3,895,154
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B S SPOONER HQ/R J WHITE 51-Biological Sci

NAG10-142 Kansas State University 4243
STARCH METABOLISM IN SPACE-GROWN SOYBEAN SEEDLINGS
Period *Obligations*
07/15/1994-07/20/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A GUIKEMA KSC/W M KNOTT 59-Life Sci, NEC

NCC 1-161 Kansas State University 4244
SURFACE TREATMENT SIZING AND INTERFACE STUDIES OF CARBON FIBERS IN COMPOSITES
Period *Obligations*
02/28/1992-02/20/1994 FY94: \$9,901 TOTAL: \$114,901
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M SHERWOOD LARC/H'G MAAHS 47-Materials Engr

NCC 2-871 Kansas State University 4245
IMPACT OF GENERAL AVIATION ON THE CENTER-TRACON AUTOMATION SYSTEM (CTAS)
Period *Obligations*
07/15/1994-05/14/1995 FY94: \$63,503 TOTAL: \$63,503
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J GORDER ARC/R K GREIF 41-Aero Engr

NAG 1-912 University of Kansas 4246
A PROGRAM OF AUGMENTED TELEBOTIC RESEARCH
Period *Obligations*
09/19/1988-12/31/1993 FY94: TOTAL: \$620,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B G BARR LARC/R W MIXON 46-Mech Engr
LARC/W W HANKINS

NAG 2-789 University of Kansas 4247
DESIGN, ANALYSIS AND CONTROL OF LARGE TRANSPORTS SO THAT CONTROL OF ENGINE THRUST CAN BE USED AS A...
Period *Obligations*
06/24/1992-12/31/1993 FY94: \$0 TOTAL: \$38,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J ROSKAM ARC/F W BURCHAM 41-Aero Engr
D GERREN ARC/R J RAY

NAG 3-1194 University of Kansas 4248
RESEARCH ON COMPUTATIONAL HEAT TRANSFER IN GAS TURBINE ENGINES
Period *Obligations*
07/16/1990-11/16/1994 FY94: \$98,264 TOTAL: \$395,585
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S FAROKHI LERC/R E GAUGLER 46-Mech Engr
A AMERI

NAG 5-1811 University of Kansas 4249
THE MEASUREMENT OF VERTICAL VELOCITIES IN CONVECTIVE STORMS USING AIRBORNE DOPPLER RADARS
Period *Obligations*
09/23/1991-09/30/1993 FY94: \$0 TOTAL: \$49,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S P GOGINENI GSFC/G M HEYMSFIELD 31-Atmos Sci
GSFC/F EINAUDI

NAG 5-2344 University of Kansas 4250
STUDIES OF MICROWAVE SCATTERING AND CANOPY ARCHITECTURE FOR BOREAL FORESTS
Period *Obligations*
07/27/1993-08/14/1995 FY94: \$46,400 TOTAL: \$93,071
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S P GOGINENI GSFC/F G HALL 39-Env Sci, NEC
P M RICH GSFC/P J SELLERS

NAG 5-2358 University of Kansas 4251
STUDIES OF MICROWAVE SCATTERING AND CANOPY ARCHITECTURE FOR BOREAL FORESTS: ACQUISITION AND...
Period *Obligations*
09/13/1993-09/14/1995 FY94: \$80,459 TOTAL: \$80,459
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M RICH GSFC/F G HALL 39-Env Sci, NEC
GSFC/P J SELLERS

NAG 8-958 University of Kansas 4252
RADAR WIND SOUNDER
Period *Obligations*
04/05/1993-09/30/1994 FY94: \$0 TOTAL: \$45,158
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K MOORE MSFC/D E FITZJARRALD 31-Atmos Sci

NAGW 1288 University of Kansas 4253
TOPOLOGY OF LARGE-SCALE STRUCTURE OF THE UNIVERSE
Period *Obligations*
05/04/1988-02/28/1993 FY94: TOTAL: \$165,440
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L MELOTT HQ/G C CLAYTON 11-Astronomy

NAGW 1559 University of Kansas 4254
PLASMA EFFECTS ON CHARGED PARTICLE TRANSPORT IN COMETS
Period *Obligations*
01/26/1989-02/28/1994 FY94: \$0 TOTAL: \$281,729
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T E CRAVENS HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1588 University of Kansas 4255
STUDIES IN PLANETARY AERONOMY
Period *Obligations*
12/28/1988-03/31/1995 FY94: \$62,990 TOTAL: \$364,601
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T E CRAVENS HQ/J T BERGSTRALH 11-Astronomy

NAGW 2923 University of Kansas 4256
THEORY OF GRAVITATIONAL INSTABILITY
Period *Obligations*
02/27/1992-02/28/1993 FY94: \$0 TOTAL: \$84,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L MELOTT HQ/R STACHNIK 13-Physics
S F SHANDARIN

NAGW 3043 University of Kansas 4257
NAGW-3043/UNIV KANSAS/SEA-ICE CLASSIFICATION BY THE INTELLIGENT INTEGRATION OF ACTIVE AND PASSIVE
Period *Obligations*
04/17/1992-04/30/1995 FY94: \$141,457 TOTAL: \$398,507
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C TSATSOUKIS HQ/R H THOMAS 33-Oceanography
P GOGINENI HQ/R A SCHIFFER

NASA'S UNIVERSITY PROGRAM **KANSAS (Continued)**

NAGW 3346 University of Kansas 4258
 NAGW-3346/UNIV KANSAS/ANALYSIS OF ICE SHEET ALTIME TRY
 DATA USING A COMBINED SURFACE/VOLUME

Period	Obligations	
01/26/1993-12/31/1995	FY94: \$0	TOTAL: \$107,985
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S COGINENI	HQ/R H THOMAS	39-Env Sci, NEC
	HQ/R A SCHIFFER	

NCC 2-805 University of Kansas 4266
 CONTROL ISSUES RELATED TO THE COMMERCIAL SUPERSONIC
 TRANSPORTS

Period	Obligations	
06/11/1993-12/14/1994	FY94: \$22,633	TOTAL: \$42,633
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D R DOWNING	ARC/E W AIKEN	41-Aero Engr
	ARC/J A FRANKLIN	

NAGW 3420 University of Kansas 4259
 NUMERICAL MODEL STUDIES

Period	Obligations	
02/19/1993-02/28/1993	FY94:	TOTAL: \$17,498
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M SEGAL	HQ/H C BRINTON	19-Phys Sci, NEC

NCC 3-251 University of Kansas 4267
 RESEARCH ON LASER-BASED DIAGNOSTIC TECHNIQUES IN F REE
 SHEAR LAYERS

Period	Obligations	
02/20/1992-01/09/1995	FY94: \$17,843	TOTAL: \$49,559
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R TAGHAVI	LERC/J M ABBOTT	41-Aero Engr

NAGW 3700 University of Kansas 4260
 MEASUREMENT OF THICKNESS OF THE GREENLAND ICE SHEET
 AND INVESTIGATION OF SCATTERING PROPERTIES

Period	Obligations	
08/10/1993-05/31/1995	FY94: \$242,865	TOTAL: \$342,865
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S P GOGINENI	HQ/R H THOMAS	39-Env Sci, NEC
	HQ/J S THEON	

NGT 00-030-062 University of Kansas 4268
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/09/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M E JAKUBAUSKAS	HQ/D M BUTLER	39-Env Sci, NEC
K P PRICE	HQ/G S WILSON	

NAGW 3810 University of Kansas 4261
 NAGW-3810/B UNIV KANSAS 'DEV OF A LAND USE MAPPING AND
 MONITORING...' 1/1/94 START

Period	Obligations	
11/19/1993-12/31/1994	FY94: \$200,000	TOTAL: \$200,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K P PRICE	HQ/A J TUYUHOV	39-Env Sci, NEC
M D NELLIS	HQ/S R SCHNEIDER	

NGT 00-030-140 University of Kansas 4269
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/21/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A F ARBOGAST	HQ/G ASRAR	32-Geological Sci
	HQ/D M BUTLER	

NAGW 3832 University of Kansas 4262
 PROBING LARGE SCALE STRUCTURE AND GALAXY INFO

Period	Obligations	
12/14/1993-12/31/1994	FY94: \$35,000	TOTAL: \$35,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A L MELOTT	HQ/R V STACHNIK	11-Astronomy
	HQ/E J WEILER	

NGT 00-030-189 University of Kansas 4270
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/02/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C TSATSOLIS	HQ/G ASRAR	39-Env Sci, NEC
	HQ/D M BUTLER	

NCA 2-766 University of Kansas 4263
 THERMAL STRESS ANALYSIS OF ANISOTROPIC COMPOSITE L
 AMINATES

Period	Obligations	
11/17/1992-02/28/1994	FY94: \$0	TOTAL: \$26,569
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J E LOCKE	ARC/K K GUPTA	41-Aero Engr

NGT 00-030-202 University of Kansas 4271
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/02/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S P GOGINENI	HQ/G ASRAR	31-Atmos Sci
	HQ/D M BUTLER	

NCC 1-172 University of Kansas 4264
 RESEARCH ON A NOVEL, SMART SUPERSONIC FLOW CONTROLLER
 NLPN 92-1206

Period	Obligations	
02/22/1993-02/21/1995	FY94: \$37,500	TOTAL: \$74,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S FAROKHI	LARC/D L CLER	41-Aero Engr
R R TAGHAVI		

NGT 00-040-026 University of Kansas 4272
 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM

Period	Obligations	
04/30/1991-02/28/1995	FY94: \$170,000	TOTAL: \$643,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D R DOWNING	HQ/E T SCHWARTZ	99-Multi-Discip

NCC 2-588 University of Kansas 4265
 FIGHTER AGILITY METRICS, RESEARCH, AND TEST

Period	Obligations	
03/13/1989-12/30/1994	FY94: \$56,434	TOTAL: \$458,953
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D R DOWNING	ARC/J GERA	41-Aero Engr
R K LIEFER	ARC/R CLARKE	
J L VALASEK		

NGT 00-050-604 University of Kansas 4273
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/24/1990-09/30/1993	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D HAVERKAMP	HQ/F C OWENS	45-Elec Engr

NASA'S UNIVERSITY PROGRAM **KANSAS (Continued)**

NGT 00-050-784 University of Kansas 4274
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/01/1991-06/30/1995 FY94: \$19,416 TOTAL: \$82,416
Prin. Invest. NASA Tech. Officer CASE Category
 T E CRAVENS HQ/F C OWENS 13-Physics

NGT 00-050-816 University of Kansas 4275
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/01/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 A L MELOTT HQ/F C OWENS 11-Astronomy

NGT 00-051-021 University of Kansas 4276
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/06/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 S P GOGINENI GSFC/G SOFFEN 45-Elec Engr

NGT 00-051-123 University of Kansas 4277
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/05/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 R K MOORE HQ/G LESANE 45-Elec Engr

NAG 1-1488 Wichita State University 4278
 PROGRESSIVE DAMAGE ANALYSIS
Period Obligations
 02/25/1993-02/28/1995 FY94: \$59,993 TOTAL: \$119,983
Prin. Invest. NASA Tech. Officer CASE Category
 S J HOOPER LARC/T K O'BRION 41-Aero Engr

NAG 3-566 Wichita State University 4279
 RESEARCH PROGRAM TO VERIFY WATER DROPLET TRAJECTORY CODES
Period Obligations
 07/25/1984-03/17/1994 FY94: \$0 TOTAL: \$723,226
Prin. Invest. NASA Tech. Officer CASE Category
 G W ZUMWALT LERC/G S BIDWELL 41-Aero Engr
 LERC/R J SHAW

NCC 1-187 Wichita State University 4280
 MATERIAL PROPERTIES AND DESIGN/CERTIFICATION GUIDELINES FOR GENERAL AVIATION STRUCTURES
Period Obligations
 02/03/1994-02/02/1995 FY94: \$131,000 TOTAL: \$131,000
Prin. Invest. NASA Tech. Officer CASE Category
 G BRINKMAN LARC/H B DEXTER 47-Materials Engr
 D ELLIS

NCC 1-195 Wichita State University 4281
 GENERAL AVIATION MARKET STUDY--IMPACT OF POTENTIAL TECHNOLOGY ADVANCEMENTS
Period Obligations
 09/07/1994-03/22/1995 FY94: \$129,998 TOTAL: \$129,998
Prin. Invest. NASA Tech. Officer CASE Category
 D R ELLIS LARC/B J HOLMES 41-Aero Engr
 LARC/C K WALKER

NCC 3-347 Wichita State University 4282
 GENERAL AVIATION ICING PROTECTION TECHNOLOGIES
Period Obligations
 04/20/1994-12/31/1994 FY94: \$31,917 TOTAL: \$31,917
Prin. Invest. NASA Tech. Officer CASE Category
 D R ELLIS LERC/T H BOND 41-Aero Engr
 LERC/T P RATVASKY

NGT 00-010-026 Wichita State University 4283
 NGT 10026/B WICHITA STATE UNIV. (MDAFP) 10/1/93 ST ART
Period Obligations
 11/22/1993-03/31/1994 FY94: \$49,369 TOTAL: \$49,369
Prin. Invest. NASA Tech. Officer CASE Category
 K ROKHSZ HQ/G S SEIDEL 41-Aero Engr
 HQ/J R FACEY

NGT 00-050-984 Wichita State University 4284
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/04/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 M PAPADAKIS LARC/E PRIOR 42-Astro Engr

KENTUCKY

NAG 8-191 Centre College 4285
 PROJECT JOVE
Period Obligations
 04/25/1991-07/27/1994 FY94: \$7,000 TOTAL: \$37,000
Prin. Invest. NASA Tech. Officer CASE Category
 J KIREKE MSFC/F SIX 99-Multi-Discip
 MSFC/CHAPPELL

NAG 8-1042 Centre College 4286
 DEVELOPMENT OF SOFTWARE FOR HIGH SPEED ANALYSIS OF SOLAR MAGNETIC FIELD DATA
Period Obligations
 03/25/1994-03/24/1995 FY94: \$7,500 TOTAL: \$7,500
Prin. Invest. NASA Tech. Officer CASE Category
 J I KINEKE MSFC/M J HAGYARD 11-Astronomy

NAG 8-990 Northern Kentucky University 4287
 JOVE
Period Obligations
 11/03/1993-05/31/1995 FY94: \$59,558 TOTAL: \$59,558
Prin. Invest. NASA Tech. Officer CASE Category
 M FALBO-KENKEL MSFC/F SIX 11-Astronomy
 R MC NEIL
 D SCHNEIDER

NAG 1-1246 University of Kentucky 4288
 IMPROVE MODELS FOR ASSEMBLED SPACE STRUCTURES: OPTIMAL IDENTIFICATION FROM SUBSTRUCTURE TO INTEGRAT
Period Obligations
 06/18/1991-08/31/1993 FY94: \$0 TOTAL: \$116,625
Prin. Invest. NASA Tech. Officer CASE Category
 S W SMITH LARC/T A KASHANGAKI 42-Astro Engr
 C A BEATHE LARC/P A COOPER

**NASA'S UNIVERSITY PROGRAM
KENTUCKY (Continued)**

NAG 1-1276 University of Kentucky 4289
INTEGRATED IMAGE DATABASE MANAGEMENT
Period Obligations
05/29/1991-07/20/1994 FY94: \$0 TOTAL: \$74,890
Pnn. Invest. NASA Tech. Officer CASE Category
R MEHROTRA LARC/P W GOODE 29-Math/Computer, NEC

NGT 00-040-049 University of Kentucky 4297
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
07/24/1991-02/28/1995 FY94: \$205,000 TOTAL: \$588,000
Pnn. Invest. NASA Tech. Officer CASE Category
R HACKNEY HQ/E SCHWARTZ 99-Multi-Discip

NAG 3-1251 University of Kentucky 4290
ADVANCED THERMAL CONTROL OF ELECTRONICS
Period Obligations
02/26/1991-01/09/1995 FY94: \$55,155 TOTAL: \$279,066
Pnn. Invest. NASA Tech. Officer CASE Category
L L CHOW LERC/K W BAKES 46-Mech Engr
LERC/M O DUSTIN

NAG 1-1446 University of Louisville 4298
APPLICATION OF EXPLICIT OPTIMAL LOG TO THE SCOPE
EXPERIMENTAL FACILITY
Period Obligations
07/20/1992-07/31/1993 FY94: \$0 TOTAL: \$10,300
Pnn. Invest. NASA Tech. Officer CASE Category
J H LILLY LARC/L W TAYLOR 42-Astro Engr

NAG 3-1588 University of Kentucky 4291
FLIGHT TEST OF A FLAT PLATE HEAT PLATE WITH INTERF
EEDERS
Period Obligations
05/01/1994-09/30/1994 FY94: \$30,154 TOTAL: \$30,154
Pnn. Invest. NASA Tech. Officer CASE Category
L C CHOW LERC/K W BAKER 46-Mech Engr

NAG 2-624 University of Louisville 4299
SPACEFLIGHT AND IMMUNE RESPONSES OF RHESUS MONKEY S
Period Obligations
02/16/1990-10/31/1994 FY94: TOTAL: \$442,352
Pnn. Invest. NASA Tech. Officer CASE Category
G SONNENFELD ARC/R BALLARD 51-Biological Sci
ARC/D SESLINE

NAGW 3315 University of Kentucky 4292
PROBING THE CENTRAL REGIONS OF ACTIVE NUCLEI
Period Obligations
01/06/1993-10/31/1995 FY94: \$266,998 TOTAL: \$389,272
Pnn. Invest. NASA Tech. Officer CASE Category
G FERLAND HQ/G R RIEGLER 11-Astronomy

NAG 2-707 University of Louisville 4300
1991-1993 COSMOS RHESUS MONKEY BED-REST AND FLIGHT
IMMUNOLOGY STUDIES
Period Obligations
05/16/1991-04/30/1994 FY94: \$0 TOTAL: \$95,000
Pnn. Invest. NASA Tech. Officer CASE Category
G SONNENFELD ARC/J P CONNOLLY 51-Biological Sci
ARC/R W BALLARD

NAGW 3786 University of Kentucky 4293
VALIDATION OF SPECTRAL ANALYSIS AS A NONINVASIVE
Period Obligations
09/30/1993-06/30/1995 FY94: \$120,000 TOTAL: \$120,000
Pnn. Invest. NASA Tech. Officer CASE Category
C F KNAPP HQ/F M SULZMAN 56-Medical Sciences

NAG 9-485 University of Louisville 4301
CYTOKINES AND IMMUNE SURVEILLANCE IN HUMANS
Period Obligations
10/01/1990-04/01/1994 FY94: TOTAL: \$80,811
Pnn. Invest. NASA Tech. Officer CASE Category
G SONNENFELD JSC/G TAYLOR 51-Biological Sci

NAGW 3839 University of Kentucky 4294
NAGW-3839/B UNIV. KENT. RES. FDTN. 'PHYSICS OF ACC RET.
DISK WINDS.' -1/1/94 START
Period Obligations
12/17/1993-12/31/1994 FY94: \$30,000 TOTAL: \$30,000
Pnn. Invest. NASA Tech. Officer CASE Category
I SHLOSMAN HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILLER

NAG 9-617 University of Louisville 4302
CYTOKINES AND MACROPHAE FUNCTION IN HUMANS ROLE OF
STRESS
Period Obligations
06/12/1992-07/01/1994 FY94: \$0 TOTAL: \$109,250
Pnn. Invest. NASA Tech. Officer CASE Category
G SONNENFELD JSC/C F SAMS 56-Medical Sciences

NCC 2-5028 University of Kentucky 4295
SPECTROSCOPY AND IMAGERY OF THE ORION NEBULA
Period Obligations
02/03/1994-01/31/1996 FY94: \$45,833 TOTAL: \$45,833
Pnn. Invest. NASA Tech. Officer CASE Category
G FERLAND ARC/A TIELENS 11-Astronomy

NAGW 70 University of Louisville 4303
RESEARCH ON SPACE BIOLOGY PROJECTS
Period Obligations
06/01/1980-11/30/1994 FY94: TOTAL: \$2,440,410
Pnn. Invest. NASA Tech. Officer CASE Category
G SONNENFELD HQ/T HALSTEAD 51-Biological Sci

NCC 2-5087 University of Kentucky 4296
EVALUATION OF A PNEUMATIC MARTIAN SOIL SAMPLER CON
CEPT
Period Obligations
07/28/1994-10/31/1994 FY94: \$5,000 TOTAL: \$5,000
Pnn. Invest. NASA Tech. Officer CASE Category
J SCHAEFER ARC/G BRIGGS 42-Astro Engr
J STENCEL ARC/C MCKAY
J NEATHERY

NAGW 4031 University of Louisville 4304
SPACE BIOLOGY RESEARCH ASSOCIATES PROGRAM
Period Obligations
06/22/1994-09/30/1994 FY94: \$248,554 TOTAL: \$248,554
Pnn. Invest. NASA Tech. Officer CASE Category
G SONNENFELD HQ/T W HALSTEAD 51-Biological Sci

NASA'S UNIVERSITY PROGRAM KENTUCKY (Continued)

NCA 2-574 University of Louisville 4305
SIGNAL TRANSDUCTION IN NEUTROPHILS
Period Obligations
11/06/1990-04/30/1993 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
G SONNENFELD ARC/D GOLDWATER 56-Medical Sciences
J KELIN

NCA 2-687 University of Louisville 4306
IMMUNOLOGICAL AND HEMATOPOIETIC BIOTECHNOLOGY STUDIES
Period Obligations
02/18/1992-02/14/1995 FY94: \$0 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
G SONNENFELD ARC/R W BALLARD 51-Biological Sci
ARC/D GOLDWATER

NAG 5-2595 Western Kentucky University 4307
UNDERREPRESENTED MINORITIES AND ASTROPHYSICS
Period Obligations
05/11/1994-05/14/1995 FY94: \$102,000 TOTAL: \$102,000
Prin. Invest. NASA Tech. Officer CASE Category
C H MCGRUDER GSFC/P J SAKIMOTO 11-Astronomy

NCCW 60 Western Kentucky University 4308
EPSCOR PROGRAM
Period Obligations
06/21/1994-06/30/1995 FY94: \$500,000 TOTAL: \$500,000
Prin. Invest. NASA Tech. Officer CASE Category
R HACKNEY HQ/A S MCGEE 99-Multi-Discip
HQ/E T SCHWARTZ

LOUISIANA

NAG 8-1010 Dillard University 4309
JOVE
Period Obligations
11/19/1993-11/30/1994 FY94: \$31,000 TOTAL: \$31,000
Prin. Invest. NASA Tech. Officer CASE Category
G ROCHON MSFC/F SIX 54-Env Biology
G LOVE

NAG 1-1359 Louisiana State University - Baton Rouge 4310
HYPERVELOCITY IMPACT OF LARGE MASSES - DATA COLLECTION AND CORRELATION
Period Obligations
12/03/1991-09/01/1993 FY94: \$0 TOTAL: \$42,795
Prin. Invest. NASA Tech. Officer CASE Category
R W COURTER LARC/W I SCALLION 19-Phys Sci, NEC

NAG 3-1641 Louisiana State University - Baton Rouge 4311
LARGE EDDY SIMULATIONS IMPROVED TURBULENCE MODELING OF FILM COOLING
Period Obligations
07/12/1994-07/11/1995 FY94: \$28,340 TOTAL: \$28,340
Prin. Invest. NASA Tech. Officer CASE Category
S ACHARYA LERC/J R SCHWAB 41-Aero Engr

NAG 5-71 Louisiana State University - Baton Rouge 4312
ULTRAVIOLET SPECTROSCOPY OF SELECTED ASTRONOMICAL SOURCES
Period Obligations
07/01/1980-07/31/1995 FY94: \$1,500 TOTAL: \$195,674
Prin. Invest. NASA Tech. Officer CASE Category
J S DRILLING GSFC/D WEST 11-Astronomy
K HUNGER

NAG 5-2062 Louisiana State University - Baton Rouge 4313
A SEARCH FOR RADIATIVE NEUTRINO DECAY FROM SUPERNOVAE AND A PROPOSAL FOR USE OF THE MICRO OBS.
Period Obligations
08/05/1992-08/31/1993 FY94: \$0 TOTAL: \$50,286
Prin. Invest. NASA Tech. Officer CASE Category
R C SVOBODA GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2113 Louisiana State University - Baton Rouge 4314
LOWER AND UPPER BOUNDARIES OF THE ZZ CETI INSTABILITY STRIP
Period Obligations
10/08/1992-03/31/1995 FY94: \$5,000 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
D KOESTER GSFC/D WEST 11-Astronomy

NAG 5-2229 Louisiana State University - Baton Rouge 4315
TRACE ELEMENT ABUNDANCES IN HOT DA WHITE DWARFS
Period Obligations
03/23/1993-09/30/1993 FY94: \$0 TOTAL: \$0
Prin. Invest. NASA Tech. Officer CASE Category
D KOESTER GSFC/R PETRE 11-Astronomy

NAG 9-714 Louisiana State University - Baton Rouge 4316
CATABOLIC EFFECTS OF WEIGHTLESSNESS AND PROPOSED COUNTERMEASURE
Period Obligations
09/29/1993-09/01/1995 FY94: \$400,000 TOTAL: \$660,000
Prin. Invest. NASA Tech. Officer CASE Category
G A BRAY JSC/H LANE 56-Medical Sciences

NAGW 1027 Louisiana State University - Baton Rouge 4317
COMPOSITION AND TRANSPORT OF GALACTIC COSMIC RAYS
Period Obligations
12/01/1986-11/30/1994 FY94: \$104,153 TOTAL: \$1,046,637
Prin. Invest. NASA Tech. Officer CASE Category
J P WEFEL HQ/M M MELLOTT 13-Physics
HQ/W V JONES

NAGW 1526 Louisiana State University - Baton Rouge 4318
THE SYSTEMATIC INTERPRETATION OF COSMIC RAY DATA
Period Obligations
12/14/1988-12/31/1994 FY94: \$128,149 TOTAL: \$684,652
Prin. Invest. NASA Tech. Officer CASE Category
T G GUZIK HQ/M M MELLOTT 13-Physics
HQ/W V JONES

NASA'S UNIVERSITY PROGRAM
LOUISIANA (Continued)

NAGW 1552 Louisiana State University - Baton Rouge 4319
 REMOTE SENSING AND IMAGE-PROCESSING TECHNOLOGIES
Period Obligations
 09/29/1988-09/30/1993 FY94: \$0 TOTAL: \$261,665
Prin. Invest. NASA Tech. Officer CASE Category
 H H ROBERTS HQ/G LASANE 39-Env Sci, NEC

NAGW 2033 Louisiana State University - Baton Rouge 4320
 ELECTRON POSITIVE ION INTERACTIONS
Period Obligations
 04/18/1990-11/30/1994 FY94: \$0 TOTAL: \$165,499
Prin. Invest. NASA Tech. Officer CASE Category
 Y K HO HQ/J BERGSTALH 11-Astronomy

NAGW 2052 Louisiana State University - Baton Rouge 4321
 DOWNDRAFT IMPACTS OF A DEVELOPING RIVER DELTA SYST EM
Period Obligations
 07/02/1990-06/30/1994 FY94: \$0 TOTAL: \$271,620
Prin. Invest. NASA Tech. Officer CASE Category
 O HUH HQ/M BALTUCK 32-Geological Sci
 D L RICKMAN HQ/T J PIEPER

NAGW 2137 Louisiana State University - Baton Rouge 4322
 OBSERVATIONS OF WHITE DWARFS AND CONSEQUENCES FOR STELLAR EVOLUTION THEORY
Period Obligations
 10/15/1990-12/31/1993 FY94: \$0 TOTAL: \$95,000
Prin. Invest. NASA Tech. Officer CASE Category
 D G KOESTER HQ/G S KUTTER 11-Astronomy
 HQ/G R KIEGLER

NAGW 2447 Louisiana State University - Baton Rouge 4323
 NAGW-2447/LOUISIANA STATE UNIV/ACCRETION PROCESSES IN ASTROPHYSICS
Period Obligations
 04/04/1991-01/31/1995 FY94: \$75,219 TOTAL: \$574,378
Prin. Invest. NASA Tech. Officer CASE Category
 J FRANK HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2607 Louisiana State University - Baton Rouge 4324
 BERYLLIUM TO SILICON ISOTOPES USING AN ADVANCED MAGNET SPECTROMETER FROM THE NASA/NMSU BALLOON-BORNE
Period Obligations
 07/19/1991-09/30/1992 FY94: \$0 TOTAL: \$101,000
Prin. Invest. NASA Tech. Officer CASE Category
 T G GUZIK HQ/T W PERRY 13-Physics

NAGW 3289 Louisiana State University - Baton Rouge 4325
 NAGW-3289/LOUISIANA STATE UNIV/INSTRUMENTATION FOR AUTOMATED NUCLEAR PARTICLE TRACK ANALYSIS
Period Obligations
 11/27/1992-09/30/1994 FY94: \$0 TOTAL: \$50,370
Prin. Invest. NASA Tech. Officer CASE Category
 M L CHERRY HQ/J D BOHLIN 13-Physics

NAGW 3560 Louisiana State University - Baton Rouge 4326
 AUTOMATED ANALYSIS OF ULTRA HIGH ENERGY COSMIC RAY EVENTS
Period Obligations
 04/27/1993-02/28/1996 FY94: \$61,100 TOTAL: \$122,595
Prin. Invest. NASA Tech. Officer CASE Category
 M L CHERRY HQ/J D BOHLIN 13-Physics

NAGW 3744 Louisiana State University - Baton Rouge 4327
 DESIGN AND DEVELOPMENT FOR A MINUTE-OF-ARC RESOLUTION GAMMA RAY IMAGING EXPERIMENT
Period Obligations
 09/29/1993-03/30/1995 FY94: \$85,000 TOTAL: \$85,000
Prin. Invest. NASA Tech. Officer CASE Category
 M L CHERRY HQ/L J KALUZIENSKI 11-Astronomy
 HQ/A N BUNNER

NAGW 3759 Louisiana State University - Baton Rouge 4328
 DEVELOPMENTAL AND PHYSIOLOGICAL PROCESSES INFLUENCING SEED PRODUCTION IN MICROGRAVITY
Period Obligations
 09/17/1993-09/30/1995 FY94: \$60,000 TOTAL: \$110,000
Prin. Invest. NASA Tech. Officer CASE Category
 M MUSGRAVE HQ/T W HALSTEAD 51-Biological Sci

NAGW 10-75 Louisiana State University - Baton Rouge 4329
 DEVELOPMENTAL AND PHYSIOLOGICAL PROCESS INFLUENCING SEED PRODUCTION IN MICROGRAVITY
Period Obligations
 07/09/1990-07/08/1995 FY94: \$0 TOTAL: \$481,436
Prin. Invest. NASA Tech. Officer CASE Category
 M E MUSGRAVE JSC/W KNOTT 51-Biological Sci

NAGW 10-139 Louisiana State University - Baton Rouge 4330
 PLANT REPRODUCTIVE DEVELOPMENT IN MICROGRAVITY
Period Obligations
 06/07/1994-11/06/1995 FY94: \$221,167 TOTAL: \$221,167
Prin. Invest. NASA Tech. Officer CASE Category
 M E MUSGRAVE KSC/W M KNOTT 55-Agriculture Sci

NCC 2-5055 Louisiana State University - Baton Rouge 4331
 A PROTOTYPE MICROMACHINED LIGHT PATH FOR AN INTEGRATED OPTICAL CO2 SENSOR
Period Obligations
 05/19/1994-11/30/1994 FY94: \$39,966 TOTAL: \$39,966
Prin. Invest. NASA Tech. Officer CASE Category
 M C MURPHY ARC/J HINES 59-Life Sci, NEC

NCCW 59 Louisiana State University - Baton Rouge 4332
 EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RES
Period Obligations
 07/01/1994-05/31/1997 FY94: \$500,000 TOTAL: \$500,000
Prin. Invest. NASA Tech. Officer CASE Category
 J P WEFEL HQ/A S MCGEE 99-Multi-Discip
 E GOODALL HQ/E T SCHWARTZ

NASA'S UNIVERSITY PROGRAM
LOUISIANA (Continued)

NGT 00-030-183 Louisiana State University - Baton Rouge 4333
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/26/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
K G HENDERSON HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-040-039 Louisiana State University - Baton Rouge 4334
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
04/10/1991-02/28/1995 FY94: \$205,000 TOTAL: \$768,000
Prin. Invest. NASA Tech. Officer CASE Category
J P WEFEL HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-927 Louisiana State University - Baton Rouge 4335
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/15/1992-06/30/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R C SVOBODA GSFC/G SOFFEN 13-Physics

NGT 00-051-015 Louisiana State University - Baton Rouge 4336
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/14/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D L CARVER SSC/A JOYCE 22-Computer Science

NGT 00-051-097 Louisiana State University - Baton Rouge 4337
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/22/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
M E MUSGRAVE KSC/B MARTIN 55-Agriculture Sci

NGT 00-051-183 Louisiana State University - Baton Rouge 4338
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/29/1993-08/22/1996 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
N LAM MSFC/B SWINFORD 32-Geological Sci

NGT 00-051-214 Louisiana State University - Baton Rouge 4339
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/06/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D L CARVER SSC/A JOYCE 22-Computer Science

NGT 00-051-215 Louisiana State University - Baton Rouge 4340
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
04/25/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D ROY SSC/A JOYCE 44-Civil Engr

NGT 00-090-197 Louisiana State University - Baton Rouge 4341
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1995 FY94: \$10,300 TOTAL: \$22,300
Prin. Invest. NASA Tech. Officer CASE Category
A STERLING HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-198 Louisiana State University - Baton Rouge 4342
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1995 FY94: \$10,300 TOTAL: \$22,300
Prin. Invest. NASA Tech. Officer CASE Category
A STERLING HQ/D K RUSSELL 99-Multi-Discip

NAG 9-167 Louisiana State University - Shreveport 4343
TEST EFFICACY + SIDE EFFECTS OF ANTIMOTN
Period Obligations
07/01/1986-06/01/1994 FY94: \$0 TOTAL: \$321,072
Prin. Invest. NASA Tech. Officer CASE Category
J J STEWART JSC/D L HARM 56-Medical Sciences
J E MANNO
H M REDETZI

NGT 00-090-195 Louisiana Tech University 4344
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
J NELSON HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-196 Louisiana Tech University 4345
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
F AKI HQ/D RUSSELL 99-Multi-Discip

NAG 8-150 Northwestern State University - Louisiana 4346
JOINT VENTURE
Period Obligations
03/20/1990-08/31/1994 FY94: \$10,599 TOTAL: \$118,290
Prin. Invest. NASA Tech. Officer CASE Category
H W HYDE MSFC/C R CHAPPELL 19-Phys Sci, NEC
MSFC/N F SIX

NAG10-131 Southeastern Louisiana University 4347
INVENTORY AND MONITORING OF HERPETOLOGICAL—COMMUNIT-
IES ON KSC/MERRITT IS NATIONAL WILDLIFE REFUGE
Period Obligations
12/10/1993-01/02/1995 FY94: \$12,875 TOTAL: \$12,875
Prin. Invest. NASA Tech. Officer CASE Category
R A SEIGEL KSC/W M KNOTT 39-Env Sci, NEC

NAG 3-1662 Southern Univ & A&M College 4348
INTELLIGENT KNOWLEDGE ACQUISITION FOR INTERACTIVE
SOFTWARE FOR ROCKET ENGINE SYSTEM DESIGN
Period Obligations
09/16/1994-09/15/1995 FY94: \$75,000 TOTAL: \$75,000
Prin. Invest. NASA Tech. Officer CASE Category
D MOREMAN LERC/D F NOGA 41-Aero Engr

NASA'S UNIVERSITY PROGRAM
LOUISIANA (Continued)

NAG 8-252 Southern Univ & A&M College 4349
ALUMINUM-LITHIUM STUDY
Period Obligations
09/18/1992-06/18/1994 FY94: \$0 TOTAL: \$44,891
Pnn. Invest. NASA Tech. Officer CASE Category
R DIWAN MSFC/G FICHTL 47-Materials Engr
MSFC/R WALKER

NAGW 3041 Southern Univ & A&M College 4350
DEVELOPMENT AND INSTALLATION OF A SCHOLARS' RESEARCH EDUCATIONAL ANALYSIS PROGRAM DATABASE
Period Obligations
04/03/1992-02/28/1993 FY94: \$0 TOTAL: \$190,922
Pnn. Invest. NASA Tech. Officer CASE Category
R L FORD HQ/O A GUTIERREZ 99-Multi-Discip
HQ/M S MARGOLIS

NAGW 3882 Southern Univ & A&M College 4351
NAGW3882/B SOUTHERN UNIV. 36-MONTH MULTI YR AWARD
Period Obligations
03/15/1994-12/31/1994 FY94: \$747,900 TOTAL: \$747,900
Pnn. Invest. NASA Tech. Officer CASE Category
V T MONTGOMERY HQ/I M BLANKSON 41-Aero Engr
S S CHEHL

NAGW 4013 Southern Univ & A&M College 4352
SPACE COMMUNICATION AND INFO RESEARCH: IMPROVED SPACE LINK PERFORMANCE VIA CONCATENATED FORWARD-ERROR
Period Obligations
06/10/1994-05/31/1995 FY94: \$100,000 TOTAL: \$100,000
Pnn. Invest. NASA Tech. Officer CASE Category
E W HINDS HQ/H L THEISS 22-Computer Science

NAG10-127 Southern Univ & A&M College 4353
FRACTOGRAPHICAL DOCUMENTATION AND CORROSION SENSORS
Period Obligations
11/09/1993-11/08/1994 FY94: \$79,318 TOTAL: \$79,318
Pnn. Invest. NASA Tech. Officer CASE Category
R M DIWAN KSC/K THOMPSON 41-Aero Engr

NGT 00-051-197 Southern Univ & A&M College 4354
NGT-51197/LOUISIANA STATE UNIV/GSRP
Period Obligations
11/05/1993-12/31/1994 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
B A MCKEE SSC/A JOYCE 33-Oceanography

NGT 00-060-004 Southern Univ & A&M College 4355
NGT-60004/SOUTHERN UNIV/SUMMER FACULTY FELLOWSHIP PROGRAM
Period Obligations
04/19/1991-01/31/1994 FY94: \$0 TOTAL: \$549,713
Pnn. Invest. NASA Tech. Officer CASE Category
E HILDRETH HQ/A S MCGEE 49-Engr, NEC
H HQ/E SCHWARTZ

NGT 00-090-118 Southern Univ & A&M College 4356
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/25/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Pnn. Invest. NASA Tech. Officer CASE Category
D BAGAYOKO HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-119 Southern Univ & A&M College 4357
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/25/1992-08/14/1994 FY94: \$12,000 TOTAL: \$24,000
Pnn. Invest. NASA Tech. Officer CASE Category
D BAGAYOKO HQ/D K RUSSELL 99-Multi-Discip

NAG 1-1270 Tulane University 4358
MOMENTUM MANAGEMENT IN REDUNDANT MANIPULATORS FOR VIBRATION SUPPRESSION
Period Obligations
04/26/1991-08/31/1993 FY94: \$0 TOTAL: \$43,542
Pnn. Invest. NASA Tech. Officer CASE Category
E BARBIERI LARC/R C MONTGOMERY 42-Astro Engr
LARC/S KENNY

NAG 3-967 Tulane University 4359
MODELING OF FRACTURE PROCESS IN FIBER REINFORCED CERAMICS
Period Obligations
12/12/1988-07/01/1994 FY94: \$0 TOTAL: \$210,000
Pnn. Invest. NASA Tech. Officer CASE Category
A A RUBENSTEIN LERC/B GROSS 47-Materials Engr

NAG 5-2216 Tulane University 4360
CLOUD IDENTIFICATION USING GENETIC ALGORITHMS AND MASSIVELY PARALLEL COMPUTATION
Period Obligations
02/18/1993-11/30/1994 FY94: \$30,000 TOTAL: \$60,000
Pnn. Invest. NASA Tech. Officer CASE Category
B P BUCKLES GSFC/J R FISCHER 22-Computer Science
F E PETRI/1

NAG 9-720 Tulane University 4361
METHODOLOGIES TO DETERMINE FORCES ON BONES AND MUSCLES OF BODY SEGMENTS DURING EXERCISE
Period Obligations
10/18/1993-08/31/1994 FY94: \$16,000 TOTAL: \$16,000
Pnn. Invest. NASA Tech. Officer CASE Category
F FIGUEROA JSC/S GOLDSTEIN 59-Life Sci, NEC

NAG 9-733 Tulane University 4362
INSECT - CELL CULTIVATION IN THE NASA HIGH-ASPECT RATIO VESSEL
Period Obligations
05/19/1994-03/01/1995 FY94: \$30,914 TOTAL: \$30,914
Pnn. Invest. NASA Tech. Officer CASE Category
K O'CONNOR JSC/S GONDA 43-Chem Engr

NAGW 1516 Tulane University 4363
INFLUENCE OF SYNAPTOGENESIS
Period Obligations
11/21/1991-04/30/1995 FY94: \$47,696 TOTAL: \$288,193
Pnn. Invest. NASA Tech. Officer CASE Category
C D FERMIN HQ/T W HALSTEAD 59-Life Sci, NEC

NCA 2-660 Tulane University 4364
AN ATTEMPT TO CLONE THE NITRATE REDUCTASE GENE OF HALOFEROX DENITRIFICANS
Period Obligations
09/17/1991-10/31/1993 FY94: \$0 TOTAL: \$29,700
Pnn. Invest. NASA Tech. Officer CASE Category
E J JOHNSON ARC/L I HOCHSTEIN 56-Medical Sciences

NASA'S UNIVERSITY PROGRAM **LOUISIANA (Continued)**

NCC 2-5011 Tulane University 4365
CONSTRUCTION OF A SPECIALIZED CLONING STRAIN OF E COLI
FOR THE NITRATE REDUCTASE GENES OF HALOFERAX
Period Obligations
11/24/1993-11/30/1995 FY94: \$14,850 TOTAL: \$14,850
Pnn. Invest. NASA Tech. Officer CASE Category
E J JOHNSON ARC/L I HOCHSTEIN 51-Biological Sci

NGT 00-030-262 Tulane University 4366
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/21/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
R G WATTS HQ/J S THEON 39-Env Sci, NEC
HQ/G ASRAR

NGT 00-050-550 Tulane University 4367
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/10/1990-06/30/1993 FY94: \$0 TOTAL: \$88,000
Pnn. Invest. NASA Tech. Officer CASE Category
A L WEIDEN HQ/F C OWENS 51-Biological Sci

NGT 00-050-695 Tulane University 4368
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/23/1991-08/31/1994 FY94: \$0 TOTAL: \$65,500
Pnn. Invest. NASA Tech. Officer CASE Category
E E MICHAELIDES HQ/F C OWENS 46-Mech Engr

NGT 00-051-012 Tulane University 4369
NGT-51012/TULANE UNIV/GRADUATE STUDENT RESEARCHERS
PROGRAM
Period Obligations
05/04/1993-05/31/1994 FY94: \$0 TOTAL: \$20,667
Pnn. Invest. NASA Tech. Officer CASE Category
J B ELSTROTT SSC/A JOYCE 29-Math/Computer, NEC

NGT 00-090-223 Tulane University 4370
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period Obligations
09/14/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Pnn. Invest. NASA Tech. Officer CASE Category
S SULLIVAN HQ/D K RUSSELL 99-Multi-Discip

NAG 1-1625 University of New Orleans 4371
SIGNAL ANALYSIS OF DYNAMIC DATA FROM THE SEDS SATELLITE
AND DEPLOYER
Period Obligations
04/21/1994-04/20/1995 FY94: \$24,127 TOTAL: \$24,127
Pnn. Invest. NASA Tech. Officer CASE Category
J W IUOP LARC/B T UPCHURCH 13-Physics
G E IOUP

NGT 00-051-014 University of New Orleans 4372
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/05/1993-06/30/1994 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
E P RUSSO SSC/A JOYCE 46-Mech Engr

NGT 00-051-213 University of New Orleans 4373
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/19/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
T SOLANKY SSC/A JOYCE 21-Mathematics

NGT 00-051-317 University of New Orleans 4374
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
E P RUSSO SSC/A JOYCE 46-Mech Engr

NGT 00-070-324 University of New Orleans 4375
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
07/23/1993-01/06/1994 FY94: \$0 TOTAL: \$0
Pnn. Invest. NASA Tech. Officer CASE Category
E RUSSO HQ/D K RUSSELL 46-Mech Engr

NAGW 3565 University of Southwestern Louisiana 4376
MAGNETOPHORETIC INDUCTION OF ROOT CURVATURE
Period Obligations
05/26/1993-04/30/1995 FY94: \$60,000 TOTAL: \$110,000
Pnn. Invest. NASA Tech. Officer CASE Category
K H HASENSTEIN HQ/T W HALSTEAD 51-Biological Sci

NAG13-24 University of Southwestern Louisiana 4377
BUILDING AN INTEGRATED ENVIRONMENT BUILDING AN
INTEGRATED ENVIRONMENT FOR MULTI-MEDIA
Period Obligations
03/17/1993-03/18/1994 FY94: \$71,068 TOTAL: \$140,698
Pnn. Invest. NASA Tech. Officer CASE Category
T WILLIAMS SSC/A JOYCE 31-Atmos Sci

NGT 00-051-007 University of Southwestern Louisiana 4378
NGT-51007/UNIV SOUTHWESTERN LOUISIANA/GRADUATE
STUDENT RESEARCHERS PORGRAM
Period Obligations
11/27/1992-01/04/1994 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
D MOREAU SSC/A JOYCE 22-Computer Science

NGT 00-090-004 Xavier University - Louisiana 4379
TRAINING GRANT
Period Obligations
01/01/1987-04/30/1995 FY94: \$137,271 TOTAL: \$935,459
Pnn. Invest. NASA Tech. Officer CASE Category
G W BAKER HQ/L WARREN 49-Engr, NEC
HQ/M MORGOLIS

MAINE

NAGW 1719 Bowdoin College 4380
EFFECTS OF GRAVITY IN EARLY AMPHIBIAN EMBRYOS
Period Obligations
04/17/1989-01/31/1995 FY94: \$85,000 TOTAL: \$361,718
Pnn. Invest. NASA Tech. Officer CASE Category
C R PHILLIPS HQ/T W HALSTEAD 51-Biological Sci

**NASA'S UNIVERSITY PROGRAM
MAINE (Continued)**

NAG 5-2590 University of Maine - Orono 4381
A STUDY OF THE DISTRIBUTION OF SOURCES AND SINKS OF BIOGENIC GAS FLUXES IN BOREAL FOREST VENUES
Period Obligations
05/12/1994-05/14/1995 FY94: \$18,379 TOTAL: \$18,379
Prin. Invest. NASA Tech. Officer CASE Category
S M GOLTZ GSFC/F G HALL 39-Env Sci, NEC
GSFC/P J SELLERS

NAGW 2780 University of Maine - Orono 4382
GAS EXCHANGE IN WETLANDS: CONTROLS AND REMOTE SENSING
Period Obligations
12/02/1991-09/30/1994 FY94: \$0 TOTAL: \$80,799
Prin. Invest. NASA Tech. Officer CASE Category
G M KING HQ/M M AVERNER 39-Env Sci, NEC

NAGW 3746 University of Maine - Orono 4383
ROOT-ASSOCIATED METHANE OXIDATION AND METHANOGENESIS: KEY DETERMINANTS OF METHANE EMISSIONS
Period Obligations
09/16/1993-07/31/1996 FY94: \$0 TOTAL: \$97,443
Prin. Invest. NASA Tech. Officer CASE Category
G M KING HQ/D E WICKLAND 39-Env Sci, NEC
HQ/A C JANETOS

NAGW 4075 University of Maine - Orono 4384
CONSTRUCTION OF A GLOBAL OCEAN WAVE CLIMATOLOGICAL ATLAS BASED ON GEOSAT DATA
Period Obligations
07/14/1994-04/14/1995 FY94: \$60,720 TOTAL: \$60,720
Prin. Invest. NASA Tech. Officer CASE Category
V PANCHANG HQ/J S THEON 33-Oceanography

NAG 8-1004 University of Southern Maine 4385
JOVE
Period Obligations
12/08/1993-05/31/1995 FY94: \$14,800 TOTAL: \$14,800
Prin. Invest. NASA Tech. Officer CASE Category
MSFC/F SIX 11-Astronomy

MARYLAND

NAG 5-1054 Bowie State College 4386
AUTOMATIC ASSEMBLY IN SPACE
Period Obligations
06/15/1988-02/28/1993 FY94: \$0 TOTAL: \$194,252
Prin. Invest. NASA Tech. Officer CASE Category
S SRIVASTAVA GSFC/G K JONES 49-Engr, NEC
S N DWIVEDI GSFC/E W TRAVIS

NAG 5-2277 Bowie State College 4387
RESEARCH AND DEVELOPMENT FOR AN INFORMATION ECOLOGY
Period Obligations
05/26/1993-06/14/1995 FY94: \$42,000 TOTAL: \$87,000
Prin. Invest. NASA Tech. Officer CASE Category
S SRIVASTAVA GSFC/W F TRUSZKOWSKI 22-Computer Science
N WAKIM

NGT 00-090-016 Bowie State College 4388
SUMMER INSTITUTE ON COMPUTER APPLICATIONS
Period Obligations
06/09/1988-05/14/1995 FY94: \$164,209 TOTAL: \$753,450
Prin. Invest. NASA Tech. Officer CASE Category
C H KIRKSEY HQ/M MARGOLIS 22-Computer Science
GSFC/D MENCHAN

NGT 00-090-063 Capitol College 4389
PRE-COLLEGE MINORITY ENGINEERING PROGRAM
Period Obligations
06/15/1992-06/14/1995 FY94: \$74,868 TOTAL: \$184,336
Prin. Invest. NASA Tech. Officer CASE Category
J JARRELL GSFC/D MENCHAN 45-Elec Engr
HQ/B WHITE

NAG 5-2042 Center For Environ & Estuarine Studies U of Md. 4390
TREE REGENERATION IN SMALL FOREST PATCHES: INTERACTIONS OF BROWSING INTENSITY AND ABIOTIC FACTORS
Period Obligations
07/15/1992-01/31/1995 FY94: \$27,000 TOTAL: \$71,645
Prin. Invest. NASA Tech. Officer CASE Category
S W SEAGLE GSFC/G A SOFFEN 54-Env Biology
GSFC/P J SAKIMOTO

NAG 5-2267 Center For Environ & Estuarine Studies U of Md. 4391
PHYSICAL - BIOLOGICAL INTERACTIONS IN THE GLOBAL EQUATORIAL SURFACE LAYER
Period Obligations
05/12/1993-05/14/1994 FY94: TOTAL: \$1,681
Prin. Invest. NASA Tech. Officer CASE Category
H W DUCKLOW GSFC/C R MCCLAIN 33-Oceanography
GSFC/A J BUSALACCHI

NAGW 3891 Center For Environ & Estuarine Studies U of Md. 4392
USE OF OCEAN COLOR DATA FROM SEAWIFS TO DETECT SEASONAL AND INTERANNUAL VARIABILITY OF PHYTOPLANKTON
Period Obligations
03/18/1994-03/31/1995 FY94: \$79,742 TOTAL: \$79,742
Prin. Invest. NASA Tech. Officer CASE Category
L W HARDING HQ/A C JANETOS 33-Oceanography
C F D'ELIA HQ/D E WICKLAND

NAGW 3947 Center For Environ & Estuarine Studies U of Md. 4393
EVAL. OF REGIONAL AND TEMPORAL VARIATION OF PRIMARY PRODUCTIVITY WITHIN CASE II SHELF WATERS - SEAWIFS
Period Obligations
04/20/1994-02/28/1995 FY94: \$52,491 TOTAL: \$52,491
Prin. Invest. NASA Tech. Officer CASE Category
T R FISHER HQ/A C JANETOS 33-Oceanography
J HARDING HQ/D E WICKLAND

NAG 5-1377 Charles County Community College 4394
INVEST. FORMATION, PROPERTIES AND METAMORPHISM
Period Obligations
04/30/1990-05/31/1994 FY94: \$0 TOTAL: \$49,963
Prin. Invest. NASA Tech. Officer CASE Category
G F KRAUSE GSFC/J A NUTH 11-Astronomy
GSFC/J E ALLEN

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NCC 5-69 Charles County Community College 4395
 LAB INVESTIGATIONS OF FORMATION PROPERTIES AND
 METAMORPHISM OF PRE-SOLAR MATERIALS
Period Obligations
 06/01/1994-05/31/1995 FY94: \$14,256 TOTAL: \$14,256
Prin. Invest. NASA Tech. Officer CASE Category
 G KRAUSE GSFC/J NUTH 11-Astronomy
 GSFC/J ALLEN

NAG 5-619 Johns Hopkins University 4402
 ROCHET AND LABORATORY EXPERIMENTS IN AERONOMY AND
 ASTRONOMY
Period Obligations
 03/01/1983-02/28/1995 FY94: \$533,000 TOTAL: \$6,821,000
Prin. Invest. NASA Tech. Officer CASE Category
 P D FELDMAN GSFC/L J EARLY 13-Physics
 A F DAVIDSEN GSFC/R H PLESS
 W G FASTIE

NAGW 4101 Coppin State College 4396
 MODEL INSTITUTIONS FOR EXCELLENCE (MIE)
Period Obligations
 09/13/1994-05/31/1995 FY94: \$74,930 TOTAL: \$74,930
Prin. Invest. NASA Tech. Officer CASE Category
 M E OWENS HQ/B L WHITE 99-Multi-Discip
 G O OGONJI

NAG 5-1099 Johns Hopkins University 4403
 DATA INTERFACES ISTP GROUND BASED DARN PROGRAM
Period Obligations
 11/01/1988-02/28/1995 FY94: \$452,400 TOTAL: \$1,305,400
Prin. Invest. NASA Tech. Officer CASE Category
 R A GREENWALD GSFC/S A CURTIS 13-Physics
 GSFC/M H ACUNA

NAG 1-1191 Johns Hopkins University 4397
 DETECTION OF BONDING DEFECTS USING COMBINED THERM-
 AL/THERMAL WAVE AND HOLOGRAPHIC/SHEAROGRAPHIC FD
Period Obligations
 10/11/1990-03/31/1995 FY94: \$40,001 TOTAL: \$191,971
Prin. Invest. NASA Tech. Officer CASE Category
 J W WAGNER LARC/W P WINFREE 19-Phys Sci, NEC
 LARC/L D MELVIN

NAG 5-1119 Johns Hopkins University 4404
 STUDY OF MULTI-PINNED-PHASE CCD DETECTOR FOR STAR
 TRACKER
Period Obligations
 02/01/1989-01/31/1995 FY94: \$0 TOTAL: \$96,315
Prin. Invest. NASA Tech. Officer CASE Category
 S D FRIEDMAN GSFC/G SONNEBORN 11-Astronomy
 GSFC/B E WOODGATE

NAG 1-1524 Johns Hopkins University 4398
 LASER SOURCES FOR GENERATION OF ULTRASOUND NLPN
 93-309
Period Obligations
 08/09/1993-08/08/1995 FY94: \$95,000 TOTAL: \$351,000
Prin. Invest. NASA Tech. Officer CASE Category
 J WAGNER LARC/W P WINFREE 19-Phys Sci, NEC

NAG 5-1476 Johns Hopkins University 4405
 EMPIRICAL DETERMINATION OF THE EFFECTS OF CLOUDS ON
 THE EARTH'S RADIATION BUDGET OVER THE PACIFIC O
Period Obligations
 10/24/1990-11/14/1992 FY94: \$0 TOTAL: \$50,193
Prin. Invest. NASA Tech. Officer CASE Category
 D F STROBEL GSFC/A ARKING 31-Atmos Sci
 D ZISKIN

NAG 1-1595 Johns Hopkins University 4399
 PULSED LASER DEPOSITION FOR THIN FILM PROCESSING OF
 PHOTOREFRACTIVE BAT103
Period Obligations
 02/10/1994-02/28/1995 FY94: \$50,500 TOTAL: \$50,500
Prin. Invest. NASA Tech. Officer CASE Category
 P R SHUSTER LARC/S S WELCH 47-Materials Engr

NAG 5-1524 Johns Hopkins University 4406
 CURRENT SHEETS IN THE EARTH'S MAGNETOSPHERE: A PARTICLE
 PERSPECTIVE
Period Obligations
 05/03/1991-05/31/1994 FY94: \$0 TOTAL: \$189,200
Prin. Invest. NASA Tech. Officer CASE Category
 D G MITCHELL GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 2-935 Johns Hopkins University 4400
 CONFERENCE ON PLASTICITY AND RECOVERY OF THE NERVOUS
 SYSTEM
Period Obligations
 09/28/1994-04/30/1995 FY94: \$65,000 TOTAL: \$65,000
Prin. Invest. NASA Tech. Officer CASE Category
 G M MCKHANN ARC/M D ROSS 56-Medical Sciences
 ARC/N G DAUNTON

NAG 5-1537 Johns Hopkins University 4407
 ROSAT IMAGING OF M83
Period Obligations
 04/28/1991-04/30/1995 FY94: \$0 TOTAL: \$28,500
Prin. Invest. NASA Tech. Officer CASE Category
 W BLAIR, GSFC/R PETRE 11-Astronomy

NAG 3-1431 Johns Hopkins University 4401
 SIXTH INTERNATIONAL SYMPOSIUM ON NONDESTRUCTIVE CH
 ARACTERIZATION OF MATERIALS
Period Obligations
 01/22/1993-09/30/1993 FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
 R E GREENE JR LERC/A VARY 47-Materials Engr

NAG 5-1538 Johns Hopkins University 4408
 THE OPTICAL CATEGORIZATION OF SATELLITE DISCOVERED
 SOURCES
Period Obligations
 05/02/1991-05/14/1995 FY94: \$21,341 TOTAL: \$135,917
Prin. Invest. NASA Tech. Officer CASE Category
 R BURG GSFC/R PETRE 11-Astronomy

NAG 5-1601 Johns Hopkins University 4409
 STUDIES OF ELECTROMAGNETIC CYCLOTRON WAVES USING
 AMPTE/CCE AND DE-1
Period Obligations
 05/03/1991-05/31/1994 FY94: \$0 TOTAL: \$138,100
Prin. Invest. NASA Tech. Officer CASE Category
 R E ERLANDSON GSFC/G D BULLOCK 19-Phys Sci, NEC

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAG 5-1617 Johns Hopkins University 4410
 SEARCH FOR CLOSE COMPANIONS OF NEARBY STARS AND TO
 SIMULATE ST IMAGES IN THE LABORATORY
Period Obligations
 05/24/1991-10/31/1994 FY94: \$133,327 TOTAL: \$499,278
Pnn. Invest. NASA Tech. Officer CASE Category
 W G FASTIE GSFC/S SOBIESKI 11-Astronomy

NAG 5-1636 Johns Hopkins University 4411
 THE MASS AND DYNAMICS OF CD CLUSTERS WITH COOLING
 FLOWS
Period Obligations
 06/14/1991-12/14/1993 FY94: \$0 TOTAL: \$15,000
Pnn. Invest. NASA Tech. Officer CASE Category
 G A KRISS GSFC/R PETRE 11-Astronomy

NAG 5-1638 Johns Hopkins University 4412
 A SUPERWIND FROM AN EDGE-ON STARBURST GALAXY
Period Obligations
 06/24/1991-06/30/1994 FY94: \$0 TOTAL: \$15,000
Pnn. Invest. NASA Tech. Officer CASE Category
 T M HECKMAN GSFC/R PETRE 11-Astronomy

NAG 5-1673 Johns Hopkins University 4413
 PHASE SPACE DENSITIES OF ENERGETIC IONS
Period Obligations
 07/15/1991-07/14/1994 FY94: \$0 TOTAL: \$186,700
Pnn. Invest. NASA Tech. Officer CASE Category
 A T LUI GSFC/G D BULLOCK 13-Physics

NAG 5-1674 Johns Hopkins University 4414
 CHARACTERISTICS OF SMALL SCALE SOLAR WIND FEATURES AND
 THEIR RELEVANCE TO TRANSIENT MAGNETOSPHERE...
Period Obligations
 07/15/1991-07/14/1994 FY94: \$0 TOTAL: \$187,900
Pnn. Invest. NASA Tech. Officer CASE Category
 D SIBECK GSFC/G BULLOCK 13-Physics

NAG 5-1676 Johns Hopkins University 4415
 COMPARATIVE STUDIES OF THE OUTER PLANETS USING IUE
 SPECTRA
Period Obligations
 07/15/1991-07/14/1994 FY94: \$0 TOTAL: \$113,186
Pnn. Invest. NASA Tech. Officer CASE Category
 H W MOOS GSFC/D WEST 11-Astronomy

NAG 5-1775 Johns Hopkins University 4416
 ULTRAVIOLET VARIABILITY IN THE IO PLASMA TORUS
Period Obligations
 09/10/1991-03/31/1995 FY94: \$8,000 TOTAL: \$39,500
Pnn. Invest. NASA Tech. Officer CASE Category
 H W MOOS GSFC/D WEST 11-Astronomy

NAG 5-1793 Johns Hopkins University 4417
 SCATTERING AND GRAIN DESTRUCTION IN THE CYGNUS LOO P
Period Obligations
 10/27/1991-10/31/1994 FY94: \$1,500 TOTAL: \$18,500
Pnn. Invest. NASA Tech. Officer CASE Category
 W P BLAIR GSFC/D WEST 11-Astronomy

NAG 5-1952 Johns Hopkins University 4418
 A STUDY OF COOLING FLOWS IN POOR CLUSTERS OF GALAX IES
Period Obligations
 03/26/1992-03/31/1994 FY94: \$0 TOTAL: \$37,000
Pnn. Invest. NASA Tech. Officer CASE Category
 G A KRISS GSFC/R PETRE 11-Astronomy

NAG 5-1953 Johns Hopkins University 4419
 ROSAT IMAGING OF NGC 7793
Period Obligations
 03/26/1992-03/31/1995 FY94: \$0 TOTAL: \$35,000
Pnn. Invest. NASA Tech. Officer CASE Category
 W P BLAIR GSFC/R PETRE 11-Astronomy

NAG 5-1991 Johns Hopkins University 4420
 X-RAY OBSERVATIONS OF A WIND FROM A DWARF GALAXY
Period Obligations
 06/05/1992-06/14/1995 FY94: \$30,000 TOTAL: \$70,000
Pnn. Invest. NASA Tech. Officer CASE Category
 T M HECKMAN GSFC/R PETRE 11-Astronomy

NAG 5-2039 Johns Hopkins University 4421
 RADIATIVE AND CONVECTIVE PROCESSES
Period Obligations
 07/17/1992-01/31/1995 FY94: \$152,000 TOTAL: \$388,174
Pnn. Invest. NASA Tech. Officer CASE Category
 A ARKING GSFC/K M LAU 31-Atmos Sci

NAG 5-2052 Johns Hopkins University 4422
 GAMMA RAY SPECTRA OF ACTIVE GALACTIC NUCLEI
Period Obligations
 07/22/1992-07/31/1994 FY94: \$0 TOTAL: \$70,000
Pnn. Invest. NASA Tech. Officer CASE Category
 J H KROLIK GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NAG 5-2128 Johns Hopkins University 4423
 OPTIMAL TEMPORAL SAMPLING INTERVALS FOR DETECTING
 LANDSCAPE VEGETATION CHANGES
Period Obligations
 10/28/1992-10/31/1994 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 J KOU GSFC/E HALL 39-Env Sci, NEC
 GSFC/D E SMITH

NAG 5-2141 Johns Hopkins University 4424
 OBSERVATIONS OF COMETS WITH THE IUE
Period Obligations
 11/13/1992-01/31/1995 FY94: \$28,970 TOTAL: \$42,500
Pnn. Invest. NASA Tech. Officer CASE Category
 D D FELDMAN GSFC/D WEST 11-Astronomy

NAG 5-2222 Johns Hopkins University 4425
 MARS OBSERVER LASER ALTIMETER INVESTIGATION
Period Obligations
 03/10/1993-03/14/1995 FY94: \$54,000 TOTAL: \$94,368
Pnn. Invest. NASA Tech. Officer CASE Category
 M T ZUBER GSFC/D E SMITH 32-Geological Sci

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAG 5-2223 Johns Hopkins University 4426
 THE ROLE OF LITHOSPHERE STRUCTURE IN LARGE SCALE COMPRESSSIONAL AND EXTENSIONAL PERFORMANCE
Period Obligations
 03/09/1993-03/14/1995 FY94: \$37,576 TOTAL: \$73,680
Prin. Invest. NASA Tech. Officer CASE Category
 M T ZUBER GSFC/S COHEN 32-Geological Sci

NAG 5-2398 Johns Hopkins University 4434
 VOYAGER OBSERVATIONS OF THE DIFFUSE FUV RADIATION FIELD
Period Obligations
 10/22/1993-10/31/1994 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
 J N MURTHY GSFC/D WEST 11-Astronomy

NAG 5-2232 Johns Hopkins University 4427
 RECEIVER DESIGN, PERFORMANCE ANALYSIS, AND EVALUATION FOR SPACE-BORNE LASER ALTIMETERS AND
Period Obligations
 04/08/1993-02/14/1995 FY94: \$192,304 TOTAL: \$252,196
Prin. Invest. NASA Tech. Officer CASE Category
 M DAVIDSON GSFC/B ABSHIRE 45-Elec Engr
 GSFC/A R RALL

NAG 5-2399 Johns Hopkins University 4435
 SEARCHING FOR SUNY AEV-ZELDOVICH DISTORTIONS IN THE COBE DMR MAPS
Period Obligations
 10/22/1993-10/31/1994 FY94: \$58,500 TOTAL: \$58,500
Prin. Invest. NASA Tech. Officer CASE Category
 A SZALAY GSFC/D WEST 11-Astronomy

NAG 5-2276 Johns Hopkins University 4428
 PROBING THE JOVIAN MAGNETOSPHERE BY ANALYZING ITS EUV EMISSIONS
Period Obligations
 05/26/1993-06/14/1995 FY94: \$0 TOTAL: \$37,907
Prin. Invest. NASA Tech. Officer CASE Category
 H W MOOS GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2454 Johns Hopkins University 4436
 EMISSION LINES FROM THE ERIDANUS SUPERBUBBLE
Period Obligations
 01/04/1994-01/14/1995 FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. NASA Tech. Officer CASE Category
 J MORTHY GSFC/D WEST 11-Astronomy

NAG 5-2298 Johns Hopkins University 4429
 VOYAGER 2 MAPPING OF THE NW REGION OF THE VELA SUPERNOVA REMNANT
Period Obligations
 06/24/1993-06/30/1995 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
 W P BLAIR GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2465 Johns Hopkins University 4437
 DETERMINING GAS DENSITIES AND GRAIN COMPOSITIONS
Period Obligations
 01/04/1994-01/14/1995 FY94: \$2,000 TOTAL: \$2,000
Prin. Invest. NASA Tech. Officer CASE Category
 R H BUSS GSFC/D WEST 11-Astronomy

NAG 5-2299 Johns Hopkins University 4430
 OBSERVATIONS OF HOT GAS WITH VOYAGER
Period Obligations
 06/30/1993-06/30/1994 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
 J N MURTHY GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2466 Johns Hopkins University 4438
 THE TEMPERATURE OF IO PLASMA TORUS ELECTRONS
Period Obligations
 01/04/1994-01/14/1995 FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. NASA Tech. Officer CASE Category
 D T HALL GSFC/D WEST 11-Astronomy

NAG 5-2341 Johns Hopkins University 4431
 VOYAGER INVESTIGATION OF THE COSMIC DIFFUSE BACKGROUND AND OBS. OF ROCKET-STUDIED LOCATIONS
Period Obligations
 07/27/1993-07/31/1994 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
 R B HENRY GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2478 Johns Hopkins University 4439
 CYCLOTRON LINE DIAGNOSTICS OF GAMMA-RAY BURST EMISSION MODELS
Period Obligations
 01/24/1994-03/31/1995 FY94: \$26,245 TOTAL: \$26,245
Prin. Invest. NASA Tech. Officer CASE Category
 J H KROLIK GSFC/J P NORRIS 11-Astronomy
 A K HARDING GSFC/N WHITE

NAG 5-2342 Johns Hopkins University 4432
 OBSERVATION OF STAR FUV ABSOLUTE FLUX APPLIED TO INTERSTELLAR GRAIN AND STELLAR ATMOSPHERIC PROPERTIES
Period Obligations
 07/27/1993-07/31/1995 FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
 R H BUSS GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2548 Johns Hopkins University 4440
 THE MOST LUMINOUS OBJECT IN THE UNIVERSE: PROTOGALAXY OR SHROUDED QUASAR
Period Obligations
 03/03/1994-03/31/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
 T M HECKMAN GSFC/N WHITE 11-Astronomy

NAG 5-2390 Johns Hopkins University 4433
 LONG-TERM TRENDS IN IO TORUS ELECTRON TEMPERATURE
Period Obligations
 10/08/1993-10/14/1994 FY94: \$34,800 TOTAL: \$34,800
Prin. Invest. NASA Tech. Officer CASE Category
 D L HALL GSFC/D WEST 11-Astronomy

NAG 5-2622 Johns Hopkins University 4441
 EUVE OBSERVATIONS OF THE JUPITER SYSTEM
Period Obligations
 06/28/1994-06/30/1995 FY94: \$38,000 TOTAL: \$38,000
Prin. Invest. NASA Tech. Officer CASE Category
 D T HALL GSFC/R OLIVERSEN 11-Astronomy

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAG 5-2728 Johns Hopkins University 4442
 STAR FORMING DWARF GALAXIES AND THE X-RAY BACK-
 GROUND
Period Obligations
 09/21/1990-03/31/1996 FY94: \$15,352 TOTAL: \$15,352
Prin. Invest. NASA Tech. Officer CASE Category
 R GRIFFITHS GSFC/N WHITE 11-Astronomy

NAG 5-5016 Johns Hopkins University 4443
 DENSITY AND TEMPERATURE MEASUREMENTS FOR MAP IN THE
 STUDIES OF MESOSPHERIC AND LOWER THERMOSPHERIC
Period Obligations
 05/28/1993-12/31/1994 FY94: \$42,000 TOTAL: \$75,000
Prin. Invest. NASA Tech. Officer CASE Category
 J H YEE GSFC/L J EARLY 13-Physics
 GSFC/R H PLESS

NAG 9-654 Johns Hopkins University 4444
 ENHANCEMENT OF CELL FUNCTION IN CULTURE BY CONTROL
 LED AGGREGATION
Period Obligations
 10/28/1992-04/01/1994 FY94: \$130,000 TOTAL: \$250,000
Prin. Invest. NASA Tech. Officer CASE Category
 W M SALTZMAN JSC/G SPAULDING 51-Biological Sci
 K W LEONG

NAGW 648 Johns Hopkins University 4445
 PLANETARY AERONOMY
Period Obligations
 09/01/1984-12/31/1994 FY94: \$96,000 TOTAL: \$836,896
Prin. Invest. NASA Tech. Officer CASE Category
 D F STROBEL HQ/J T BERGSTRALH 31-Atmos Sci
 HQ/W L QUAIDE

NAGW 1650 Johns Hopkins University 4446
 CORRELATIVE STUDIES OF SOLAR-PLANETARY RELATIONSHIPS
Period Obligations
 03/02/1989-12/31/1994 FY94: \$121,000 TOTAL: \$681,432
Prin. Invest. NASA Tech. Officer CASE Category
 T A PSTEMRA HQ/M M MELLOTT 13-Physics

NAGW 1885 Johns Hopkins University 4447
 MID INFRARED SPECTROSCOPIC INVESTIGATIONS
Period Obligations
 12/06/1989-09/30/1994 FY94: \$134,455 TOTAL: \$669,055
Prin. Invest. NASA Tech. Officer CASE Category
 J W SALISBURY HQ/T A MAXWELL 32-Geological Sci
 HQ/M BALTUCK

NAGW 1890 Johns Hopkins University 4448
 ISSUES IN THE STUDY OF THE DIFFUSE COSMIC BACKGROUND
 RADIATION
Period Obligations
 12/14/1989-04/30/1995 FY94: \$30,000 TOTAL: \$439,907
Prin. Invest. NASA Tech. Officer CASE Category
 R C HENRY HQ/G C CLAYTON 31-Atmos Sci

NAGW 2059 Johns Hopkins University 4449
 SOLAR WIND CONTROL OF DAYSIDE IONOSPHERIC CONVECTION
Period Obligations
 05/04/1990-03/31/1995 FY94: \$74,400 TOTAL: \$325,800
Prin. Invest. NASA Tech. Officer CASE Category
 K B BAKER HQ/M M MELLOTT 13-Physics
 HQ/T PERRY

NAGW 2148 Johns Hopkins University 4450
 NAGW-2148/JOHN HOPKINS UNIV/A PROPOSAL TO INVESTIGATE
 THE GENERATION, PROPAGATION AND EFFECTS OF INTE
Period Obligations
 07/09/1990-05/31/1994 FY94: \$0 TOTAL: \$168,275
Prin. Invest. NASA Tech. Officer CASE Category
 D F STROBEL HQ/R D MCPETERS 31-Atmos Sci
 HQ/M J PRATHER

NAGW 2307 Johns Hopkins University 4451
 NAGW-2307/JOHNS HOPKINS UNIV/JHU PARTICIPATION IN THE
 PHYSICAL AND CHEMICAL EVOLUTION OF PROTOSTELLAR
Period Obligations
 12/14/1990-10/31/1994 FY94: \$0 TOTAL: \$34,528
Prin. Invest. NASA Tech. Officer CASE Category
 D A NEUFELD HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2373 Johns Hopkins University 4452
 ENERGETIC PARTICLE TRANSPORT, SOURCES, AND LOSSES AT
 NEPTUNE
Period Obligations
 02/25/1991-02/28/1994 FY94: \$0 TOTAL: \$200,200
Prin. Invest. NASA Tech. Officer CASE Category
 A F CHENG HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2433 Johns Hopkins University 4453
 RESEARCH OF NEPTUNE'S MAGNETOSPHERE
Period Obligations
 03/15/1991-12/31/1993 FY94: \$0 TOTAL: \$245,300
Prin. Invest. NASA Tech. Officer CASE Category
 B H MAUK HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2443 Johns Hopkins University 4454
 NAGW-2443/JOHNS HOPKINS UNIV/TRITON AERONOMY: VOYAGER
 UVS DATA ANALYSIS
Period Obligations
 04/22/1991-03/31/1994 FY94: \$0 TOTAL: \$163,111
Prin. Invest. NASA Tech. Officer CASE Category
 D F STROBEL HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2508 Johns Hopkins University 4455
 THE STUDY OF CLUSTERS OF GALAXIES AND LARGE-SCALE
 STRUCTURE
Period Obligations
 07/25/1991-04/30/1995 FY94: \$106,400 TOTAL: \$392,000
Prin. Invest. NASA Tech. Officer CASE Category
 R BURG HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2583 Johns Hopkins University 4456
 NAGW-2583/JOHN HOPKINS UNIV/MODELING PERPENDICULAR
 CURRENT SHEETS IN THE EARTH'S MAGNETOTAIL
Period Obligations
 08/12/1991-05/31/1994 FY94: \$0 TOTAL: \$227,384
Prin. Invest. NASA Tech. Officer CASE Category
 D G MITCHELL HQ/M M MELLOTT 13-Physics
 HQ/J D BOHLIN

NAGW 2619 Johns Hopkins University 4457
 PARTICLE ACCELERATION AND PROPAGATION IN THE OUTER
 HELIOSPHERE
Period Obligations
 07/17/1991-02/28/1995 FY94: \$0 TOTAL: \$120,000
Prin. Invest. NASA Tech. Officer CASE Category
 R B DECKER HQ/W V JONES 13-Physics
 HQ/J C LING

**NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)**

NAGW 2691 Johns Hopkins University 4458
AUTOMATED UNFOLDING OF GLOBAL MAGNETOSPHERIC IMAGE S
Period Obligations
08/07/1991-05/31/1997 FY94: \$70,000 TOTAL: \$267,558
Prin. Invest. NASA Tech. Officer CASE Category
B H MAUK HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 3052 Johns Hopkins University 4465
QUANTITATIVE ANALYSIS OF EMIC WAVE-PARTICLE INTERACTIONS
Period Obligations
05/15/1992-03/31/1995 FY94: \$73,500 TOTAL: \$213,500
Prin. Invest. NASA Tech. Officer CASE Category
B J ANDERSON HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 2719 Johns Hopkins University 4459
SYNTHETIC APERTURE RADAR (SAR) OCEAN WAVE RESEARCH: METEOROLOGICAL APPLICATIONS PROGRAM
Period Obligations
09/16/1991-12/31/1994 FY94: \$70,000 TOTAL: \$190,000
Prin. Invest. NASA Tech. Officer CASE Category
R C BEAL HQ/W C PATZERT 31-Atmos Sci
HQ/J S THEON

NAGW 3056 Johns Hopkins University 4466
A FEEDBACK CONTROL SYSTEM TO QUANTITATIVELY REDUCE AMBULATORY FORCES ON LIMB BONES
Period Obligations
04/15/1992-06/30/1994 FY94: \$0 TOTAL: \$20,040
Prin. Invest. NASA Tech. Officer CASE Category
L SCHULTHEIS HQ/J K ALEXANDER 59-Life Sci, NEC
HQ/D A HOLLAND

NAGW 2854 Johns Hopkins University 4460
AN EMPIRICAL MODEL OF IONOSPHERIC MAPPING BASED ON MAGNETOSPHERIC PRECIPITATION SOURCES
Period Obligations
01/31/1992-03/31/1995 FY94: \$70,000 TOTAL: \$195,000
Prin. Invest. NASA Tech. Officer CASE Category
P J NEWELL HQ/D L REASONER 13-Physics
HQ/J D BOHLIN

NAGW 3058 Johns Hopkins University 4467
NAGW-3058/JOHNS HOPKINS UNIV/GROUND-SATELLITE OBSERVATIONS OF P12 PULSATIONS
Period Obligations
04/27/1992-03/31/1995 FY94: \$48,000 TOTAL: \$168,000
Prin. Invest. NASA Tech. Officer CASE Category
K TAKAHASHI HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 2866 Johns Hopkins University 4461
INTEGRATED DUAL IMAGING DETECTOR
Period Obligations
02/10/1992-02/14/1994 FY94: \$189,600 TOTAL: \$616,100
Prin. Invest. NASA Tech. Officer CASE Category
D M RUST HQ/J K ALEXANDER 11-Astronomy
HQ/D A HOLLAND

NAGW 3125 Johns Hopkins University 4468
NAGW-3125/JOHNS HOPKINS UNIV/RADIATION FIELD MODELLING AT TWILIGHT
Period Obligations
09/12/1992-03/31/1995 FY94: \$38,000 TOTAL: \$67,134
Prin. Invest. NASA Tech. Officer CASE Category
D E ANDERSON HQ/M J KURYLO 31-Atmos Sci
HQ/R F HAMPSON

NAGW 2874 Johns Hopkins University 4462
ADAPTABILITY, VARIABILITY, AND CHAOS IN THE VESTIBULAR AND OCULOMOTOR SYSTEMS
Period Obligations
02/10/1992-02/28/1995 FY94: \$119,401 TOTAL: \$320,384
Prin. Invest. NASA Tech. Officer CASE Category
M J SHELHAMER HQ/J K ALEXANDER 56-Medical Sciences
HQ/D A HOLLAND

NAGW 3129 Johns Hopkins University 4469
NAGW-3129/JOHN HOPKINS UNIV/FUNDAMENTAL ISSUES IN THE PHYSICS OF PAIR PLASMAS
Period Obligations
07/14/1992-04/30/1995 FY94: \$80,000 TOTAL: \$120,000
Prin. Invest. NASA Tech. Officer CASE Category
J H KROLIK HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 2892 Johns Hopkins University 4463
THE OUTER REGIONS OF DISK GALAXIES: HOW DO DISKS FORM?
Period Obligations
02/19/1992-12/31/1994 FY94: \$0 TOTAL: \$90,043
Prin. Invest. NASA Tech. Officer CASE Category
R F WYSE HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3147 Johns Hopkins University 4470
NAGW-3147/JOHNS HOPKINS UNIV/A MULTIWAVELENGTH STUDY OF MOLECULES IN THE INTERSTELLAR MEDIUM
Period Obligations
08/04/1992-05/31/1995 FY94: \$201,766 TOTAL: \$293,847
Prin. Invest. NASA Tech. Officer CASE Category
D NEUFELD HQ/G R REGLER 11-Astronomy

NAGW 2910 Johns Hopkins University 4464
LYMAN ALPHA OBSERVATIONS AS A PROBE OF DISTANT GALAXIES
Period Obligations
02/20/1992-01/31/1994 FY94: \$0 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
D A NEUFELD HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3156 Johns Hopkins University 4471
NAGW-3156/JOHNS HOPKINS UNIV/VARIABILITY ANALYSIS AND THE STRUCTURE OF ACTIVE GALACTIC NUCLEI
Period Obligations
09/04/1992-08/31/1995 FY94: \$147,192 TOTAL: \$370,082
Prin. Invest. NASA Tech. Officer CASE Category
J KROLIK HQ/G R RIEGLER 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)**

NAGW 3183 Johns Hopkins University 4472
NAGW-3183/JOHNS HOPKINS UNIV/MISSION SCIENTIST ON THE
EUROPEAN SPACE AGENCY INFRARED SPACE OBSERVATO
Period Obligations
09/15/1992-06/30/1995 FY94: \$10,000 TOTAL: \$38,808
Prin. Invest. NASA Tech. Officer CASE Category
D A NEUFELD HQ/L J CAROFF 11-Astronomy

NAGW 3257 Johns Hopkins University 4473
NAGW-3257/JOHNS HOPKINS UNIV/LIGHT AND OPTICS EXPERI
MENTS FOR ELEMENTARY SCHOOL CHILDREN
Period Obligations
10/26/1992-01/31/1994 FY94: \$0 TOTAL: \$4,910
Prin. Invest. NASA Tech. Officer CASE Category
J H KROLIK HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 3288 Johns Hopkins University 4474
NAGW-3288/JOHNS HOPKINS UNIV/HIGH ENERGY ASTROPHYS ICS
RESEARCH AND ANALYSIS PROGRAM
Period Obligations
11/27/1992-06/30/1995 FY94: \$100,000 TOTAL: \$183,985
Prin. Invest. NASA Tech. Officer CASE Category
R E GRIFFITHS HQ/L KALUZIENSKI 11-Astronomy

NAGW 3387 Johns Hopkins University 4475
SPACEBORNE GEOPHYSICAL SAMPLING DEVICE
Period Obligations
02/25/1993-03/31/1994 FY94: \$0 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
A F CHENG HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3394 Johns Hopkins University 4476
PLANETARY GEOPHYSICS AND VOLCANISM
Period Obligations
04/01/1993-02/28/1995 FY94: \$67,793 TOTAL: \$112,303
Prin. Invest. NASA Tech. Officer CASE Category
M T ZUBER HQ/J M BOYCE 32-Geological Sci

NAGW 3449 Johns Hopkins University 4477
CROSS FIELD CURRENT DISRUPTION MECHANISM FOR SUBST ORM
INITIATION
Period Obligations
03/19/1993-02/28/1995 FY94: \$73,500 TOTAL: \$143,500
Prin. Invest. NASA Tech. Officer CASE Category
A Y LUI HQ/E C WHIPPLE 13-Physics
HQ/G L WITHBROE

NAGW 3523 Johns Hopkins University 4478
SUBSTORMS AND MAGNETIC FLUX EROSION
Period Obligations
04/14/1993-01/31/1995 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
D G SIBECK HQ/E C WHIPPLE 13-Physics
HQ/G L WITHBROE

NAGW 3697 Johns Hopkins University 4479
VENUS TECTONICS AND LITHOSPHERE STRUCTURE
Period Obligations
09/07/1993-07/31/1996 FY94: \$67,008 TOTAL: \$132,010
Prin. Invest. NASA Tech. Officer CASE Category
M T ZUBER HQ/J T BERGSTRALH 32-Geological Sci

NAGW 3831 Johns Hopkins University 4480
SPATIAL DISTRIBUTION AND EVOLUTION OF LYMAN
Period Obligations
12/17/1993-12/31/1996 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
A S SZALAY HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3861 Johns Hopkins University 4481
JOHNS HOPKINS UNIV; STATISTICAL ANALYSIS OF TRIGON
OMETRIC PARALLAXES
Period Obligations
01/31/1994-05/31/1995 FY94: \$131,200 TOTAL: \$131,200
Prin. Invest. NASA Tech. Officer CASE Category
S CASERTANO HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3991 Johns Hopkins University 4482
A GLOBAL 3D MODEL OF NEPTUNE'S MAGNETOSPHERE
Period Obligations
06/15/1994-04/30/1995 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
R L MCNUTT HQ/E C WHIPPLE 11-Astronomy
HQ/J D BOHLIN

NAGW 4020 Johns Hopkins University 4483
RELATIONSHIP TO BURSTY BULK FLOW
Period Obligations
06/06/1994-04/30/1995 FY94: \$31,200 TOTAL: \$31,200
Prin. Invest. NASA Tech. Officer CASE Category
V ANGELOPOULOS HQ/E C WHIPPLE 13-Physics

NAGW 4025 Johns Hopkins University 4484
SPACE OBSERVATIONS OF STARBURST GALAXIES
Period Obligations
06/07/1994-05/31/1995 FY94: \$290,904 TOTAL: \$290,904
Prin. Invest. NASA Tech. Officer CASE Category
T HECKMAN HQ/D E NEW 11-Astronomy

NAGW 4036 Johns Hopkins University 4485
IAA CONFERENCE ON LOW-COST PLANETARY MISSIONS
Period Obligations
06/03/1994-03/31/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
S M KRIMIGIS HQ/M E KICZA 99-Multi-Discip

NAGW 4043 Johns Hopkins University 4486
HOT ION DYNAMICS OF JUPITER'S MAGNETOSPHERE
Period Obligations
06/14/1994-01/31/1997 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
M KANE HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 4055 Johns Hopkins University 4487
CORRELATIVE STUDIES OF INOSPHERIC ELECTRON
TEMPERATURES AT HIGH LATITUDES
Period Obligations
06/17/1994-04/30/1997 FY94: \$66,600 TOTAL: \$66,600
Prin. Invest. NASA Tech. Officer CASE Category
R E ERLANDSON HQ/M MELLOTT 13-Physics

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAGW 4133 Johns Hopkins University 4488
 DISTRIBUTION AND EVOLUTION OF EMIC WAVES IN THE EARTH'S
 MAGNETOSPHERE
Period Obligations
 09/13/1994-05/31/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
 B J ANDERSON HQ/E C WHIPPLE 13-Physics
 HQ/J D BOHLIN

NAGW 4140 Johns Hopkins University 4489
 DEVELOPMENT OF MAGNETOSPHERIC IMAGING TECHNIQUES
Period Obligations
 09/14/1994-08/31/1995 FY94: \$44,700 TOTAL: \$44,700
Prin. Invest. NASA Tech. Officer CASE Category
 E C ROELOF HQ/E C WHIPPLE 13-Physics
 HQ/J D BOHLIN

NAS 5-26848 Johns Hopkins University 4490
 PERFORM DEFINITION PHASE INVESTIGATION OF A
 MULTISPECTRAL AURORAL IMAGING DEVICE FOR OPEN
Period Obligations
 12/20/1982-07/01/1995 FY94: \$0 TOTAL: \$318,500
Prin. Invest. NASA Tech. Officer CASE Category
 P D FELDMAN GSFC/F WAINSCOTT 19-Phys Sci, NEC

NAS 5-27000 Johns Hopkins University 4491
 DEVELOPMENT PHASE OF THE HOPKINS ULTRAVIOLET
 TELESCOPE
Period Obligations
 09/21/1981-05/31/1996 FY94: \$2,043,000 TOTAL: \$30,692,900
Prin. Invest. NASA Tech. Officer CASE Category
 A DAVIDSEN MSFC/J H OWENS 11-Astronomy

NAS 5-30403 Johns Hopkins University 4492
 SPACE TELESCOPE IMAGING SPECTROGRAPH PROGRAM
 SUPPORT
Period Obligations
 02/04/1988-09/30/1997 FY94: \$138,880 TOTAL: \$492,686
Prin. Invest. NASA Tech. Officer CASE Category
 W MOOS GSFC/D VITABLANO 41-Aero Engr

NAS 5-31248 Johns Hopkins University 4493
 PHASE B DEFINITION OF LYMAN FOR ULTRAVIOLET
Period Obligations
 08/01/1990-09/30/1994 FY94: \$3,835,648 TOTAL: \$9,656,840
Prin. Invest. NASA Tech. Officer CASE Category
 W MOOS GSFC/E F THOMAS 11-Astronomy

NAS 5-31373 Johns Hopkins University 4494
 EOS INVESTIGATION
Period Obligations
 12/13/1991-12/14/2001 FY94: \$85,000 TOTAL: \$215,000
Prin. Invest. NASA Tech. Officer CASE Category
 J SALISBURY GSFC/H BLODGET 31-Atmos Sci

NCC 2-5081 Johns Hopkins University 4495
 VESTIBULAR-NERVE INPUTS TO LINEAR VESTIBULO-OCULAR
 REFLEXES
Period Obligations
 07/15/1994-07/14/1996 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 L B MINOR ARC/D L TOMKO 51-Biological Sci

NGT 00-040-004 Johns Hopkins University 4496
 NATIONAL SPACE GRANT COLLEGE
Period Obligations
 10/04/1989-01/31/1995 FY94: \$345,000 TOTAL: \$1,768,000
Prin. Invest. NASA Tech. Officer CASE Category
 R C HENRY HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-486 Johns Hopkins University 4497
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/31/1989-09/30/1992 FY94: \$0 TOTAL: \$62,000
Prin. Invest. NASA Tech. Officer CASE Category
 A PROSPERETTI HQ/F C QWENS 46-Mech Engr

NGT 00-050-587 Johns Hopkins University 4498
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/31/1990-08/31/1994 FY94: \$0 TOTAL: \$88,000
Prin. Invest. NASA Tech. Officer CASE Category
 M T ZUBER HQ/J T LYNCH 32-Geological Sci

NGT 00-051-134 Johns Hopkins University 4499
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/19/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 W M SALTZMAN HQ/G LASANE 43-Chem Engr

NGT 00-030-209 Loyola College 4500
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 08/26/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 G FEELEY-HARNIK HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NAG 1-1492 Morgan State University 4501
 CENTER FOR EXCELLENCE IN UNDERGRADUATE RESEARCH IN
 SCIENCE AND MATHEMATICS (CURE-SAM) NLPN 92-1021
Period Obligations
 03/02/1993-05/01/1995 FY94: \$282,658 TOTAL: \$510,610
Prin. Invest. NASA Tech. Officer CASE Category
 A L TEATE LARC/K H ABBOTT 29-Math/Cmputer,NEC
 C M WILLIAMS
 F W OLIVER

NAG 5-2375 Morgan State University 4502
 RESEARCH ON HIGH T SUPERCONDUCTING COMPOUNDS
Period Obligations
 09/29/1993-01/15/1995 FY94: \$113,075 TOTAL: \$113,075
Prin. Invest. NASA Tech. Officer CASE Category
 F W OLIVER GSFC/W SULLIVAN 13-Physics

NAG 5-2408 Morgan State University 4503
 MAINTENANCE AND TRAINING SUPPORT FOR THE ETA-10 SU
 PERCOMPUTER (A COMPONENT OF THE MU-SPIN PROGRAM)
Period Obligations
 10/25/1993-10/31/1994 FY94: \$314,395 TOTAL: \$314,395
Prin. Invest. NASA Tech. Officer CASE Category
 W LUPTON GSFC/J BENNETT 29-Math/Cmputer,NEC

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAG 5-2686 Morgan State University 4504
NEUTRAL NETWORKS AND STATISTICAL/MATHEMATICAL
APPROACHES TO MODIS THERMAL-VACUUM CALIBRATION
Period *Obligations*
08/11/1994-03/14/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A D GRAINGER GSFC/B W GUENTHER 13-Physics

NAGW 4093 Morgan State University 4505
MINORITY UNIVERSITY RESEARCH IMPACT TRAINING
Period *Obligations*
07/26/1994-06/30/1995 FY94: \$75,000 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A A TEATE HQ/B L WHITE 99-Multi-Discip

NCA 5-105 Morgan State University 4506
ENGINEERING ENRICHMENT PROGRAM
Period *Obligations*
06/26/1985-05/31/1995 FY94: \$60,000 TOTAL: \$517,901
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C WHITE GSFC/D MENCHAN 49-Engr, NEC

NGT 00-010-005 Morgan State University 4507
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP P
ROGRAM
Period *Obligations*
10/19/1993-08/31/1994 FY94: \$51,310 TOTAL: \$51,310
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C J SCOTT HQ/G S SEIDEL 41-Aero Engr
C A FRY HQ/J R FACEY

NGT 00-090-042 Morgan State University 4508
NAGW-90042/MORGAN STATE UNIV/UNDERGRADUATE STUDENT
RESEARCHERS PROGRAM (UMF)
Period *Obligations*
08/14/1992-08/31/1995 FY94: \$36,000 TOTAL: \$142,622
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E DELOATCH HQ/D RUSSELL 49-Engr, NEC

NGT 00-090-116 Morgan State University 4509
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/24/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E DELOATCH HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-117 Morgan State University 4510
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E DELOATCH HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-236 Morgan State University 4511
GRADUATE TRAINING IN IMAGE PROCESSING
Period *Obligations*
10/27/1993-08/31/1994 FY94: \$115,000 TOTAL: \$115,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E C HAMMOND JR. GSFC/G R BAKER 22-Computer Science
GSFC/S STOVALL-ALEXANDER

NGT 00-090-158 Prince George's Community College 4512
PGCC-NASA COLLEGIATE PROGRAM
Period *Obligations*
05/13/1993-10/31/1995 FY94: \$0 TOTAL: \$117,085
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P A CUNIFF GSFC/D MENCHAN 99-Multi-Discip

NAG 8-992 Salisbury State College 4513
JOVE
Period *Obligations*
12/01/1993-05/31/1995 FY94: \$73,000 TOTAL: \$73,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L TYROLL MSFC/F SIX 19-Phys Sci, NEC
A PICA
S HETZLER

NGT 00-050-611 Uniformed Services University 4514
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/05/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N E GRUNBERG HQ/F C OWENS 69-Psych, NEC

NAG 5-1593 University of Maryland - Baltimore 4515
LABORATORY SPECTROSCOPY TO SUPPORT THE AIRS SOUNDER
Period *Obligations*
05/20/1991-03/31/1995 FY94: \$50,000 TOTAL: \$200,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L L STROW GSFC/J SUSSKIND 31-Atmos Sci

NAGW 2649 University of Maryland - Baltimore 4516
MATHEMATICAL BIOLOGY FOR SUPPORT OF CLINICAL DECISIONS
Period *Obligations*
09/03/1991-03/14/1995 FY94: \$0 TOTAL: \$434,970
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W P COLEMAN HQ/R J WHITE 59-Life Sci, NEC

NAS 5-31378 University of Maryland - Baltimore 4517
EOS EXECUTION PHASE
Period *Obligations*
12/16/1991-12/16/2001 FY94: \$192,000 TOTAL: \$483,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L L STROW GSFC/E R KREINS 39-Env Sci, NEC

NGT 00-090-137 University of Maryland - Baltimore 4518
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/24/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E BAKER HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-155 University of Maryland - Baltimore 4519
OUTREACH PROGRAM FOR FEDERAL LABS
Period *Obligations*
01/13/1993-12/31/1994 FY94: \$121,400 TOTAL: \$221,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F HRABOYSKI LARC/R LANG 99-Multi-Discip
HQ/B WHITE

NGT 00-090-180 University of Maryland - Baltimore 4520
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E BAKER HQ/D K RUSSELL 99-Multi-Discip

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAG 1-1089 University of Maryland - College Park 4521
 APPLICATION OF LARGE EDDY SIMULATIONS TO TRANSITIONAL CHANNEL FLOWS

Period	Obligations	
01/18/1990-01/14/1995	FY94: \$40,414	TOTAL: \$213,826
Prin. Invest.	NASA Tech. Officer	CASE Category
U PIOMELLI	LARC/T A ZANG	41-Aero Engr
	LARC/A KUMAR	

NAG 1-1521 University of Maryland - College Park 4528
 A NEURAL NETWORK BASED HELICOPTER SIMULATOR NLPN 93-442

Period	Obligations	
07/19/1993-07/18/1994	FY94: \$0	TOTAL: \$53,264
Prin. Invest.	NASA Tech. Officer	CASE Category
C Z SUN	LARC/G W WALKER	22-Computer Science
	LARC/A E PHELPS	

NAG 1-1192 University of Maryland - College Park 4522
 STUDIES OF ADVANCED HYPERSONIC WAVERIDER CONFIGURATIONS

Period	Obligations	
10/26/1990-08/21/1994	FY94: \$45,030	TOTAL: \$244,198
Prin. Invest.	NASA Tech. Officer	CASE Category
J D ANDERSON	LARC/S BAUER	41-Aero Engr
M J LEWIS	LARC/D S MILLER	

NAG 1-1528 University of Maryland - College Park 4529
 EXPERIMENTAL AND NUMERICAL STUDY OF A 3-D, SHEAR-DRIVEN BOUNDARY LAYER NLPN 93-504

Period	Obligations	
07/14/1993-07/13/1994	FY94: \$0	TOTAL: \$25,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J M WALLACE	LARC/M J WALSH	41-Aero Engr
U PIOMELLI		

NAG 1-1253 University of Maryland - College Park 4523
 DYNAMIC ANALYSIS OF AN ADVANCED TILT ROTOR

Period	Obligations	
04/15/1991-03/31/1994	FY94: \$0	TOTAL: \$125,083
Prin. Invest.	NASA Tech. Officer	CASE Category
I CHOPRA	LARC/W T YEAGER	41-Aero Engr

NAG 1-1540 University of Maryland - College Park 4530
 DYNAMICS AND CONTROL OF SUPERSONIC/HYPERSONIC VEHICLES -- A MULTIDISCIPLINARY STUDY NLPN 93-410

Period	Obligations	
08/24/1993-02/23/1995	FY94: \$120,000	TOTAL: \$180,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D K SCHMIDT	LARC/L M GREGORY	41-Aero Engr
J D ANDERSON		
M J LEWIS		

NAG 1-1285 University of Maryland - College Park 4524
 SPACECRAFT TRAJECTORY OPTIMIZATION FOR CONTROLLED RADIATION EXPOSURE

Period	Obligations	
06/03/1991-12/31/1994	FY94: \$0	TOTAL: \$50,892
Prin. Invest.	NASA Tech. Officer	CASE Category
M J LEWIS	LARC/J E NEALY	42-Astro Engr

NAG 1-1560 University of Maryland - College Park 4531
 ADAPTIVE DIRECT STIMULATION MONTE CARLO METHODS ON DISTRIBUTED MEMORY ARCHITECTURES AND WORKSTATION

Period	Obligations	
01/05/1994-01/03/1995	FY94: \$33,351	TOTAL: \$33,351
Prin. Invest.	NASA Tech. Officer	CASE Category
J SALTZ	LARC/R G WILMOTH	22-Computer Science
	LARC/J N MOSS	

NAG 1-1333 University of Maryland - College Park 4525
 UNSTEADY FLOW PROPERTIES OF TYPE IV SHOCK/SHOCK INTERACTIONS

Period	Obligations	
09/06/1991-02/28/1995	FY94: \$13,197	TOTAL: \$66,034
Prin. Invest.	NASA Tech. Officer	CASE Category
M J LEWIS	LARC/A KUMAR	41-Aero Engr
J D ANDERSON		
B L HUNT		

NAG 1-1627 University of Maryland - College Park 4532
 COMPUTATIONAL ASSESSMENT OF STRESS RECOVERY TECHNIQUES

Period	Obligations	
04/22/1994-04/21/1995	FY94: \$20,000	TOTAL: \$20,000
Prin. Invest.	NASA Tech. Officer	CASE Category
S W LEE	LARC/J M HOUSNER	46-Mech Engr

NAG 1-1384 University of Maryland - College Park 4526
 COMPUTATIONAL HEAT TRANSFER STUDIES OF SWEEPED RAMP FUEL INJECTORS FOR SUPERSONIC COMBUSTION

Period	Obligations	
02/13/1992-09/30/1994	FY94:	TOTAL: \$43,694
Prin. Invest.	NASA Tech. Officer	CASE Category
J D ANDERSON	LARC/G B NORTHAM	41-Aero Engr
E S SEITERT		

NAG 2-409 University of Maryland - College Park 4533
 AEROELASTIC STABILITY ANALYSIS OF BEARINGLESS ROTORS IN FORWARD FLIGHT.

Period	Obligations	
06/01/1986-05/31/1993	FY94: \$0	TOTAL: \$394,888
Prin. Invest.	NASA Tech. Officer	CASE Category
I CHOPRA	ARC/K Q NGUYEN	41-Aero Engr
	ARC/R L PETERSON	

NAG 1-1485 University of Maryland - College Park 4527
 SCALABLE RUNTIME SUPPORT FOR SPARSE AND ADAPTIVE COMPUTATIONS

Period	Obligations	
03/01/1993-02/28/1995	FY94: \$344,001	TOTAL: \$835,923
Prin. Invest.	NASA Tech. Officer	CASE Category
J H SALTZ	LARC/E J PRIOR	22-Computer Science
	LARC/M D SALAS	

NAG 2-557 University of Maryland - College Park 4534
 HIGH RESOLUTION FAR-INFRARED STUDIES OF COMPACT REGIONS OF STAR-FORMING MOLECULAR CLOUDS

Period	Obligations	
01/15/1989-09/30/1994	FY94: \$4,000	TOTAL: \$124,580
Prin. Invest.	NASA Tech. Officer	CASE Category
L G MUNDY	ARC/L C HAUGHNEY	11-Astronomy

**NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)**

NAG 2-627 University of Maryland - College Park 4535
PIONEER 10/11 DATA ANALYSIS AND INTERPRETATION
Period *Obligations*
03/15/1990-12/31/1995 FY94: \$630,000 TOTAL: \$1,895,721
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F B McDONALD ARC/L E LASHER 11-Astronomy
ARC/R O FIMMEL

NAG 2-787 University of Maryland - College Park 4536
EVOLUTION AND GRAVITY RECEPTORS IN THE EAR
Period *Obligations*
05/27/1992-04/30/1995 FY94: \$48,500 TOTAL: \$149,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A N POPPER ARC/M L CORCORAN 51-Biological Sci
12/C E WADE

NAG 2-793 University of Maryland - College Park 4537
SIMULATION MODELING FOR ADVANCED ROTORCRAFT FLIGHT
CONTROL SYSTEM DESIGN
Period *Obligations*
07/21/1992-08/31/1994 FY94: \$0 TOTAL: \$33,215
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R CELI ARC/M B TISCHLER 41-Aero Engr

NAG 2-794 University of Maryland - College Park 4538
TECHNIQUES FOR DESIGNING ROTORCRAFT SYSTEMS
Period *Obligations*
07/21/1992-03/31/1994 FY94: \$0 TOTAL: \$127,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W S LEVINE ARC/M B TISCHLER 41-Aero Engr
J B BARLOW

NAG 2-856 University of Maryland - College Park 4539
ENERGETICS, STRUCTURE, AND PHYSICAL CONDITIONS OVER
LARGE SCALES IN MOLECULAR CLOUDS
Period *Obligations*
08/06/1993-09/30/1994 FY94: \$0 TOTAL: \$13,018
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E HOWE ARC/C D LAUGHLIN 11-Astronomy
ARC/C M GILLESPIE

NAG 2-889 University of Maryland - College Park 4540
HELICOPTER VIBRATION REDUCTION WITH DYNAMICALLY TUNED
BLADE PITCH LINKS
Period *Obligations*
03/24/1994-12/31/1994 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I CHOPRA ARC/S R KOTTAPALLI 41-Aero Engr

NAG 2-898 University of Maryland - College Park 4541
BLADE-VORTEX INTERACTION NOISE COMPARISONS WITH EXPERIMENT
Period *Obligations*
05/09/1994-11/30/1994 FY94: \$29,766 TOTAL: \$29,766
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D BAEDER ARC/C KITAPLIOGLU 41-Aero Engr

NAG 3-1180 University of Maryland - College Park 4542
A THEORETICAL STUDY OF THE INFLUENCE OF THE EARTH'S GRAVITY AND OF A
ZERO GRAVITY ENVIRONMENT ON EXPERIMENTAL MEASUREMENTS OF THE CRITICAL PROPERTIES
Period *Obligations*
06/14/1990-01/16/1994 FY94: \$0 TOTAL: \$303,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A FERRELL LERC/R A WILKINSON 13-Physics

NAG 3-1321 University of Maryland - College Park 4543
EXISTENCE, UNIQUENESS, AND ERROR ESTIMATION IN THE REED-WALKER NUMERICAL METHOD APPLIED TO MAT MODELING
Period *Obligations*
01/29/1992-09/01/1994 FY94: \$0 TOTAL: \$105,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H W HASLACH LERC/A D FREED 47-Materials Engr

NAG 3-1395 University of Maryland - College Park 4544
CRITICAL DYNAMICS OF FLUIDS
Period *Obligations*
12/21/1992-12/14/1994 FY94: \$182,000 TOTAL: \$364,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A FERRELL LERC/R A WILKINSON 13-Physics

NAG 3-1488 University of Maryland - College Park 4545
PRIMARY ZONE FUEL-AIR MIXING STUDIES FOR LOW NOX ADVANCED SUBSONIC COMBUSTOR DEVELOPMENT
Period *Obligations*
04/29/1993-02/07/1995 FY94: \$57,867 TOTAL: \$105,414
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A K GUPTA LERC/T M SANDERS 41-Aero Engr
H L RUSSELL

NAG 3-1575 University of Maryland - College Park 4546
COOPERATIVE CONTROL THEORY AND INTEGRATED FLIGHT/PULSION CONTROL
Period *Obligations*
02/28/1994-02/27/1995 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D K SCHMIDT LERC/S GARG 41-Aero Engr

NAG 5-216 University of Maryland - College Park 4547
THERMODYNAMIC AND SPECTROSCOPIC STUDIES RELEVANT TO A JOVIAN SATELLITE
Period *Obligations*
01/15/1982-01/31/1994 FY94: \$0 TOTAL: \$307,775
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K KHANNA GSFC/J C PEARL 11-Astronomy

NAG 5-252 University of Maryland - College Park 4548
SATELLITE OBSERVATIONS OF DISTANT DUSTY
Period *Obligations*
07/01/1982-02/28/1993 FY94: \$0 TOTAL: \$209,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M F A'HEARN GSFC/D WEST 11-Astronomy
L A MCFADDEN
D G SCHLEICHER

NAG 5-705 University of Maryland - College Park 4549
RESEARCH RELATIVE TO MUON AND ELECTRON EXPERIMENT
Period *Obligations*
10/01/1985-11/30/1994 FY94: \$60,000 TOTAL: \$608,444
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G GLOECKLER GSFC/G BULLOCK 11-Astronomy
A B GALVIN
G M MASON

NAG 5-716 University of Maryland - College Park 4550
SCIENTIFIC ANALYSIS OF DATA FROM THE CHARGE ENERGY MASS SPECTROMETER
Period *Obligations*
10/01/1985-03/14/1994 FY94: \$0 TOTAL: \$2,332,608
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S GLOECKNER GSFC/S CURTIS 13-Physics
D HAMILTON
F IPAVICH

**NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)**

NAG 5-728 University of Maryland - College Park 4551
RESEARCH RELATIVE TO NUCLEAR AND IONIC CHARGE
DISTRIBUTION EXPERIMENTS-ISEE
Period *Obligations*
02/01/1986-03/31/1993 FY94: \$0 TOTAL: \$930,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F M IPAVICH GSFC/G BULLOCK 11-Astronomy
F M SPAVICK
A B GALVIN

NAG 5-867 University of Maryland - College Park 4552
REMOTE SENSING OF THE ATMOSPHERE, TWO-LEVEL
ANALYSIS--THE AFRICAN DROUGHT
Period *Obligations*
01/01/1987-01/31/1993 FY94: \$0 TOTAL: \$884,198
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R T BAER GSFC/J R BATES 31-Atmos Sci
Y MINTZ

NAG 5-914 University of Maryland - College Park 4553
MESOSCALE SURFACE RADIATION BUDGETS FROM SATELLITE
OBSERVATIONS: DERIVATION AND VALIDATION
Period *Obligations*
07/01/1987-12/31/1994 FY94: \$180,819 TOTAL: \$807,482
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R T PINKER GSFC/M D CHOU 31-Atmos Sci

NAG 5-942 University of Maryland - College Park 4554
MONITORING THE GRASSLANDS OF SUB-SAHARAN AFRICA
Period *Obligations*
07/01/1987-10/31/1993 FY94: \$0 TOTAL: \$891,327
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C O JUSTICE GSFC/C J TUCKER 39-Env Sci, NEC
S N GOWARD GSFC/B N HOLBEN

NAG 5-1101 University of Maryland - College Park 4555
COMPREHENSIVE THEORETICAL AND COMPUTATIONAL MODELING
PROGRAM
Period *Obligations*
12/01/1988-04/30/1995 FY94: \$503,251 TOTAL: \$2,823,451
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K PAPADOPOULOS GSFC/S A CURTIS 13-Physics
GSFC/M H ACUNA

NAG 5-1129 University of Maryland - College Park 4556
CLUSTER AND CORONAL MASS EJECTIONS
Period *Obligations*
04/15/1989-10/30/1994 FY94: \$15,000 TOTAL: \$300,794
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A COPLAN GSFC/K W OGILVIE 13-Physics

NAG 5-1134 University of Maryland - College Park 4557
SPACE SCIENCES RESEARCH
Period *Obligations*
07/01/1989-01/31/1995 FY94: \$326,364 TOTAL: \$1,192,591
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D TRASCO GSFC/T KOSTIUK 11-Astronomy
R A BELL

NAG 5-1176 University of Maryland - College Park 4558
COOPERATIVE RESEARCH IN SATELLITE-BASED STUDIES
Period *Obligations*
07/01/1989-07/31/1993 FY94: \$0 TOTAL: \$2,848,308
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D TRASCO GSFC/F C JONES 11-Astronomy
R A BELL

NAG 5-1272 University of Maryland - College Park 4559
ANALYSIS OF IUE SPECTRA OF COMETS
Period *Obligations*
08/15/1989-12/31/1994 FY94: \$0 TOTAL: \$127,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A A'HEARN GSFC/D WEST 11-Astronomy

NAG 5-1299 University of Maryland - College Park 4560
PIONEER 10/11 AND VOYAGER 12 DATA ANALYSIS AND
INTERPRETATION
Period *Obligations*
09/15/1989-05/14/1993 FY94: \$0 TOTAL: \$311,275
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F MCDONALD GSFC/N LAI 11-Astronomy

NAG 5-1356 University of Maryland - College Park 4561
THEORETICAL STUDY OF 3-DIMENSIONAL RECONNECTIONS
Period *Obligations*
04/10/1990-05/31/1996 FY94: \$35,000 TOTAL: \$151,750
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M FINN GSFC/D S SPICER 13-Physics
GSFC/M L GOLDSTEIN

NAG 5-1427 University of Maryland - College Park 4562
FUNDAMENTAL PROCESSES IN INTRACAVITY DYE LASER
Period *Obligations*
08/14/1990-12/31/1992 FY94: \$0 TOTAL: \$58,728
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C C DAVIS GSFC/J E ALLEN 13-Physics

NAG 5-1450 University of Maryland - College Park 4563
MILLIMETER IMAGING OF ENERGETIC ELECTRONS
Period *Obligations*
08/23/1990-12/31/1994 FY94: \$55,000 TOTAL: \$185,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M R KUNDU GSFC/J P NORRIS 11-Astronomy
S M WHITE GSFC/D A KNIFFEN

NAG 5-1471 University of Maryland - College Park 4564
COARSE RESOLUTION REMOTE SENSING OF THE SAHELIAN
ENVIRONMENT
Period *Obligations*
10/01/1990-02/14/1994 FY94: \$0 TOTAL: \$543,115
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S D PRINCE GSFC/B N HOLBEN 39-Env Sci, NEC

NAG 5-1532 University of Maryland - College Park 4565
X-RAY MAPPING OF THE NEARBY SEYFERT GALAXY NGC 106 8
WITH ROSAT
Period *Obligations*
04/24/1991-04/30/1993 FY94: \$0 TOTAL: \$31,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A S WILSON GSFC/R PETRE 11-Astronomy

NAG 5-1558 University of Maryland - College Park 4566
GLOBAL ELECTRIC FIELD DETERMINATION IN THE EARTH'S OUTER
MAGNETOSPHERE USING CHARGES PARTICLES
Period *Obligations*
04/17/1991-05/14/1993 FY94: \$0 TOTAL: \$123,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T EASTMAN GSFC/G D BULLOCK 19-Phys Sci, NEC

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAG 5-1694 University of Maryland - College Park 4567
 COOPERATIVE RESEARCH IN THE STUDY OF TERRESTRIAL PLANETS

Period	Obligations	
07/01/1991-08/31/1994	FY94: \$257,116	TOTAL: \$926,170
Prin. Invest.	NASA Tech. Officer	CASE Category
R A BELL	GSFC/J R HEIRTZLER	11-Astronomy
J D TRASCO		

NAG 5-1695 University of Maryland - College Park 4568
 COOPERATIVE RESEARCH IN SPACE GEODESY AND CRUSTAL DYNAMICS

Period	Obligations	
07/01/1991-08/31/1994	FY94: \$123,893	TOTAL: \$987,076
Prin. Invest.	NASA Tech. Officer	CASE Category
R A BELL	GSFC/B PUTNEY	11-Astronomy
J D TRASCO		

NAG 5-1696 University of Maryland - College Park 4569
 PARTICIPATION IN TOMS MISSION

Period	Obligations	
07/15/1991-12/14/1994	FY94: \$53,992	TOTAL: \$313,936
Prin. Invest.	NASA Tech. Officer	CASE Category
R D HUDSON	GSFC/J R HERMAN	31-Atmos Sci
	GSFC/R D MCPETERS	

NAG 5-1736 University of Maryland - College Park 4570
 EVOLUTION OF THE DUST AND GAS CONTENT OF GIANT MOLECULAR CLOUDS

Period	Obligations	
08/15/1991-08/14/1993	FY94: \$0	TOTAL: \$55,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L BLITZ	GSFC/D WEST	11-Astronomy

NAG 5-1782 University of Maryland - College Park 4571
 ATMOSPHERE LIDAR: METEOROLOGICAL OBSERVATIONS AND NEW INSTRUMENT CONCEPTS

Period	Obligations	
09/10/1991-06/30/1994	FY94: \$0	TOTAL: \$78,275
Prin. Invest.	NASA Tech. Officer	CASE Category
T D WILKERSON	GSFC/G K SCHWEMMER	31-Atmos Sci

NAG 5-1834 University of Maryland - College Park 4572
 CARBON STORAGE IN SOILS ALONG TRANSGRESSIVE COASTLINES

Period	Obligations	
11/26/1991-05/31/1993	FY94: \$0	TOTAL: \$67,500
Prin. Invest.	NASA Tech. Officer	CASE Category
M C RABENHORST	GSFC/L S WALTER	32-Geological Sci
S N COWARD		
M S KEARNEY		

NAG 5-1835 University of Maryland - College Park 4573
 CLIMATE MODEL CALCULATIONS OF THE EFFECTS OF VOLCANOES ON GLOBAL CLIMATE

Period	Obligations	
11/27/1991-11/30/1995	FY94: \$166,200	TOTAL: \$347,200
Prin. Invest.	NASA Tech. Officer	CASE Category
A ROBUCK	GSFC/L S WALTER	31-Atmos Sci
K E TAYLOR		

NAG 5-1890 University of Maryland - College Park 4574
 A STUDY OF KINETICS OF MAGNETIZATION IN HIGH TC SUPERCONDUCTORS

Period	Obligations	
01/30/1992-02/14/1993	FY94: \$0	TOTAL: \$10,874
Prin. Invest.	NASA Tech. Officer	CASE Category
M TURCHINSKAYA	GSFC/Y FLOM	13-Physics

NAG 5-1933 University of Maryland - College Park 4575
 FLOW VISUALIZATION OF A CAPILLARY PUMPED LOOP EVAPORATOR

Period	Obligations	
03/12/1992-09/14/1993	FY94: \$0	TOTAL: \$15,000
Prin. Invest.	NASA Tech. Officer	CASE Category
K E HEROLD	GSFC/T D SWANSON	41-Aero Engr
	GSFC/J KU	

NAG 5-1966 University of Maryland - College Park 4576
 PHOTOFRAGMENT SPECTROSCOPY OF HIGHLY CHARGED MOLECULAR IONS

Period	Obligations	
04/03/1992-04/30/1994	FY94: \$0	TOTAL: \$55,676
Prin. Invest.	NASA Tech. Officer	CASE Category
J WEINER	GSFC/J W KELLER	12-Chemistry

NAG 5-1971 University of Maryland - College Park 4577
 MEASURING VOLCANIC SULFUR DIOXIDE EMISSION FROM SATELLITES

Period	Obligations	
04/20/1992-04/30/1995	FY94: \$110,399	TOTAL: \$245,049
Prin. Invest.	NASA Tech. Officer	CASE Category
C C SCHNETZLER	GSFC/A J KRUEGER	39-Env Sci, NEC
	GSFC/D L WILLIAMS	

NAG 5-1979 University of Maryland - College Park 4578
 HIGH TC SUPERCONDUCTING BOLOMETERS ON SILICON SUBSTRATES

Period	Obligations	
05/04/1992-05/14/1994	FY94: \$0	TOTAL: \$47,000
Prin. Invest.	NASA Tech. Officer	CASE Category
T VENKATESAN	GSFC/J C BRASUNAS	13-Physics
S BHATTACHARYA		

NAG 5-2001 University of Maryland - College Park 4579
 SOLAR FLARE PHYSICS

Period	Obligations	
07/01/1992-06/30/1995	FY94: \$80,759	TOTAL: \$305,015
Prin. Invest.	NASA Tech. Officer	CASE Category
M R KUNDU	GSFC/C J CRANNELL	11-Astronomy
E J SCHMAHL		
M J ASCHWANDER		

NAG 5-2004 University of Maryland - College Park 4580
 FLEX-GEAR ELECTRICAL/MECHANICAL POWER TRANSMISSION

Period	Obligations	
07/15/1992-09/30/1993	FY94: \$0	TOTAL: \$21,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L W TSAI	GSFC/J M VRANISH	46-Mech Engr

NAG 5-2011 University of Maryland - College Park 4581
 CORONAL X-RAY EMISSION FROM SINGLE, MAGNETIC WHITE DWARFS

Period	Obligations	
07/15/1992-07/14/1995	FY94: \$0	TOTAL: \$17,000
Prin. Invest.	NASA Tech. Officer	CASE Category
V L TRIMBLE	GSFC/R PETRE	11-Astronomy

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAG 5-2093 University of Maryland - College Park 4582
 IUE OBSERVATIONS OF COMETS AND RELATED BODIES
Period *Obligations*
 09/15/1992-01/31/1995 FY94: \$37,010 TOTAL: \$54,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M F A'HEARN GSFC/D WEST 11-Astronomy

NAG 5-2107 University of Maryland - College Park 4583
 A STUDY OF THE DEVELOPMENT OF GEOPHYSICAL DATA SET
 FROM REMOTE SENSING DATA
Period *Obligations*
 10/13/1992-10/31/1994 FY94: \$183,127 TOTAL: \$356,377
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A J FLEIG GSFC/S SAMADI 22-Computer Science
 J R TOWNSHEND GSFC/L M STUART

NAG 5-2117 University of Maryland - College Park 4584
 BIOPHYSICAL MODELS AND SATELLITE DATA: FURTHER ANALYSIS
 OF THE FIFE RESULTS AT THE UNIV OF MARYLAN
Period *Obligations*
 10/09/1992-11/14/1994 FY94: \$80,211 TOTAL: \$180,751
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R D HUDSON GSFC/F HALL 39-Env Sci, NEC
 GSFC/P SELLERS

NAG 5-2202 University of Maryland - College Park 4585
 DEVELOPMENT AND APPLICATION OF THREE-DIMENSIONAL R
 ADIATION MAGNETOHYDRODYNAMIC CODE FOR MASSIVELY..
Period *Obligations*
 02/23/1993-11/30/1994 FY94: \$30,000 TOTAL: \$58,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J M STONE GSFC/J R FISCHER 22-Computer Science
 J F HAWLEY

NAG 5-2293 University of Maryland - College Park 4586
 BIOSPHERIC DYNAMICS IN THE BOREAL FOREST ECOTONE
Period *Obligations*
 06/17/1993-06/30/1995 FY94: \$60,000 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N GOWARD GSFC/F G HALL 39-Env Sci, NEC
 GSFC/P SELLERS

NAG 5-2296 University of Maryland - College Park 4587
 TRANSIENT 511 KEV EMISSION FROM 1E1740.7-2942 AND SOURCES
 NEAR THE GALACTIC CENTER
Period *Obligations*
 06/17/1993-02/28/1995 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M LEVENTHAL GSFC/J TUELLER 11-Astronomy

NAG 5-2308 University of Maryland - College Park 4588
 BIOPHYSICAL SIGNIFICANCE OF SPECTRAL VEGETATION INDICES
 IN THE BOREAL FOREST
Period *Obligations*
 07/14/1993-07/15/1994 FY94: \$203,400 TOTAL: \$248,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C L WALTHALL GSFC/F G HALL 39-Env Sci, NEC
 GSFC/P SELLERS

NAG 5-2339 University of Maryland - College Park 4589
 CO2 WATER FLUXES IN THE BOREAL FOREST OVERSTORY
Period *Obligations*
 07/27/1993-07/31/1995 FY94: \$29,170 TOTAL: \$35,670
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J SULLIVAN GSFC/E MIDDLETON 39-Env Sci, NEC

NAG 5-2340 University of Maryland - College Park 4590
 DEVELOPMENT OF SURFACE PASSIVATION FOR HG CD TE IR
 DETECTORS
Period *Obligations*
 07/27/1993-10/31/1994 FY94: \$0 TOTAL: \$15,156
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A A ILIADIS GSFC/B MOTT 45-Elec Engr
 GSFC/R MARTINEAU

NAG 5-2352 University of Maryland - College Park 4591
 ELECTRON BEAMS IN SOLAR FLARES
Period *Obligations*
 08/12/1993-09/30/1994 FY94: \$25,250 TOTAL: \$50,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J ASCHWANDEN GSFC/J NORRIS 11-Astronomy
 GSFC/N WHITE

NAG 5-2359 University of Maryland - College Park 4592
 HIGH-SPEED MODULATION OF DIFFRACTION-LIMITED HIGH- POWER
 SEMICONDUCTOR LASER AMPLIFIER
Period *Obligations*
 09/09/1993-09/14/1995 FY94: \$50,000 TOTAL: \$94,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M DAGENAIS GSFC/D M CORNWALL 45-Elec Engr
 GSFC/M A KRAINAK

NAG 5-2361 University of Maryland - College Park 4593
 OBSERVATIONS OF OCEAN HEAT TRANSPORT
Period *Obligations*
 08/31/1993-09/14/1994 FY94: \$0 TOTAL: \$13,845
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J A CARTON GSFC/M M RIENECKER 33-Oceanography

NAG 5-2364 University of Maryland - College Park 4594
 A SEARCH FOR ROTATIONAL MODULATION OF THE CORONAL/
 TRANSITION REGION RADIATION FROM AB
Period *Obligations*
 09/09/1993-09/14/1994 FY94: \$0 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S M WHITE HQ/R OLIVERSEN 11-Astronomy

NAG 5-2370 University of Maryland - College Park 4595
 MODELING AND REMOTE SENSING OF RADIANT ENERGY INTE
 RACTION AND PHYSIOLOGICAL FUNCTIONING IN A ...
Period *Obligations*
 09/21/1993-09/30/1995 FY94: \$124,081 TOTAL: \$124,081
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J TOWNSHEND GSFC/D WILLIAMS 39-Env Sci, NEC
 R MYNENI

NAG 5-2374 University of Maryland - College Park 4596
 EUV SPECTROSCOPY OF HERCULES X-1
Period *Obligations*
 01/06/1994-01/14/1995 FY94: \$33,224 TOTAL: \$33,224
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S D VRTILEK GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2380 University of Maryland - College Park 4597
 SEARCH FOR GALACTIC GAMMA-RAY LINE EMISSION USING
 BATSE
Period *Obligations*
 09/29/1993-09/30/1994 FY94: \$83,000 TOTAL: \$83,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M LEVENTHAL GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAG 5-2386 University of Maryland - College Park 4598
 ANNIHILATION RADIATION FROM THE MILKY-WAY GALAXY

Period	Obligations	
10/06/1993-10/14/1995	FY94: \$20,000	TOTAL: \$20,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M LEVENTHAL	GSFC/N GAHRELS	11-Astronomy

NAG 5-2532 University of Maryland - College Park 4606
 PULSE PHASE SPECTROSCOPY OF LMC X-4 AND ILLUMINATING THE ACCRETION PROCESS

Period	Obligations	
02/28/1994-03/14/1995	FY94: \$15,000	TOTAL: \$15,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S D VRTILEK	GSFC/N WHITE	11-Astronomy

NAG 5-2396 University of Maryland - College Park 4599
 AVHRR PATHFINDER LAND DATA VALIDATION

Period	Obligations	
10/15/1993-10/31/1994	FY94: \$86,266	TOTAL: \$86,266
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J TOWNSHEND	GSFC/K J RANSON	39-Env Sci, NEC

NAG 5-2571 University of Maryland - College Park 4607
 SEARCH FOR CORRELATION OF GAMMA RAY BURSTS WITH GR AVITATIONAL WAVE ANTENNA OBSERVATIONS

Period	Obligations	
04/11/1994-12/31/1994	FY94: \$10,000	TOTAL: \$10,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J WEBER	GSFC/N GEHRELS	13-Physics

NAG 5-2400 University of Maryland - College Park 4600
 ASTROPHYSICS CONFERENCE SUPPORT

Period	Obligations	
10/13/1993-12/31/1994	FY94: \$50,000	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J D TRASKO	GSFC/S S HOLT	11-Astronomy

NAG 5-2604 University of Maryland - College Park 4608
 THE STUDY OF TRANSPORT OF GALACTIC COSMIC RAYS

Period	Obligations	
05/23/1994-05/31/1995	FY94: \$57,500	TOTAL: \$57,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F McDONALD	GSFC/R STREITMATTER	11-Astronomy

NAG 5-2406 University of Maryland - College Park 4601
 MEASURING SULFUR DIOXIDE EMISSION FROM EXPLOSIVE V OLCANISM

Period	Obligations	
10/26/1993-10/31/1994	FY94: \$28,710	TOTAL: \$28,710
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G J BLUTH	GSFC/L S WALTER	32-Geological Sci

NAG 5-2640 University of Maryland - College Park 4609
 A DEEP ROSAT HRI OBSERVATION OF NGC 1068

Period	Obligations	
07/05/1994-01/14/1996	FY94: \$30,000	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A WILCOX	GSFC/R PETRE	11-Astronomy

NAG 5-2429 University of Maryland - College Park 4602
 MULTIWAVELENGTH STUDIES OF HER X-1

Period	Obligations	
11/09/1993-11/14/1994	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S D VRTILEK	GSFC/R PETRE	11-Astronomy

NAG 5-2647 University of Maryland - College Park 4610
 DETERMINATION OF OPTICAL CONSTANTS OF SOME OXY-SUL FUR COMPOUNDS IN THE THERMAL INFRARED REGION....

Period	Obligations	
06/30/1994-10/31/1994	FY94: \$13,075	TOTAL: \$13,075
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R K KHANNA	GSFC/J C PEARL	12-Chemistry

NAG 5-2482 University of Maryland - College Park 4603
 PARALLEL COMPUTATION FOR IRREGULAR DATA STRUCTURES AND PROBLEMS

Period	Obligations	
02/08/1994-02/14/1995	FY94: \$166,000	TOTAL: \$166,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L DAVIS	GSFC/J R FISCHER	22-Computer Science
	GSFC/J E DORRABAND	

NAG 5-2648 University of Maryland - College Park 4611
 NASA SPACE COMMUNICATIONS INFRASTRUCTURE SYSTEM OF INFORMATION HANDLING AND RESOURCES MANAGEMENT...

Period	Obligations	
07/14/1994-07/14/1995	FY94: \$525,000	TOTAL: \$525,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E E MILLER	GSFC/D J HEI	49-Engr, NEC
AKIN		

NAG 5-2500 University of Maryland - College Park 4604
 MULTIWAVELENGTH OBSERVATIONS OF HER X-1

Period	Obligations	
02/10/1994-02/14/1995	FY94: \$1,500	TOTAL: \$1,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S VITILEK	GSFC/D WEST	11-Astronomy

NAG 5-2676 University of Maryland - College Park 4612
 THE NON-AXISYMMETRIC MILKY WAY

Period	Obligations	
08/11/1994-08/14/1995	FY94: \$22,500	TOTAL: \$22,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L BLITZ	GSFC/D WEST	11-Astronomy

NAG 5-2531 University of Maryland - College Park 4605
 X-RAY LINE DIAGNOSTICS FOR THE YOUNG ACTIVE STAR A B DORADUS

Period	Obligations	
02/24/1994-03/14/1995	FY94: \$12,500	TOTAL: \$12,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S M WHITE	GSFC/N WHITE	11-Astronomy

NAG 8-1027 University of Maryland - College Park 4613
 RADIO JET STUDY

Period	Obligations	
01/27/1994-02/17/1995	FY94: \$34,000	TOTAL: \$34,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A S WILSON	MSFC/M E ROSENTHAL	11-Astronomy

NASA'S UNIVERSITY PROGRAM **MARYLAND (Continued)**

NAG 9-548 University of Maryland - College Park 4614
 RE-OS ISOTOPIC INVESTIGATION OF METEORITES
Period *Obligations*
 09/10/1991-05/01/1993 FY94: TOTAL: \$94,913
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R J WALKER JSC/I D BROWNE 19-Phys Sci, NEC

NAGW 1661 University of Maryland - College Park 4622
 STUDY OF PLASMA INSTABILITIES IN THE MAGNETOSPHERE
Period *Obligations*
 03/02/1989-01/31/1995 FY94: \$0 TOTAL: \$302,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J F DRAKE HQ/M MELLOTT 31-Atmos Sci

NAGW 558 University of Maryland - College Park 4615
 U.S.-INDIA COOPERATIVE RESEARCH ON MONSOON VARIABILITY
Period *Obligations*
 12/19/1983-03/31/1993 FY94: \$0 TOTAL: \$1,069,435
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J SHUKLA HQ/R K KAKAR 31-Atmos Sci
 HQ/J S THEON

NAGW 1813 University of Maryland - College Park 4623
 INFRARED AURORAL PROCESSES IN JUPITER
Period *Obligations*
 07/10/1989-06/30/1995 FY94: \$0 TOTAL: \$213,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J A'HEARN HQ/J T BERGSTRALH 32-Geological Sci

NAGW 902 University of Maryland - College Park 4616
 THEORETICAL SPECTROSCOPY OF COMETS
Period *Obligations*
 06/01/1986-12/31/1994 FY94: \$0 TOTAL: \$498,455
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M F A'HEARN HQ/H C BRINTON 11-Astronomy
 HQ/J H RAHE

NAGW 1848 University of Maryland - College Park 4624
 OBSERVATIONS OF THE MAGNETOPAUSE CURRENT LAYER
Period *Obligations*
 09/22/1989-12/31/1994 FY94: \$0 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T E EASTMAN HQ/M M MELLOTT 13-Physics
 HQ/T W PERRY

NAGW 1152 University of Maryland - College Park 4617
 TOWARD NEW THEORIES IN MACROSEAL BIOCLIMATOLOGY
Period *Obligations*
 08/01/1987-07/31/1994 FY94: \$0 TOTAL: \$734,805
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N GOWARD HQ/D E WICKLAND 39-Env Sci, NEC
 HQ/T J PIEPER

NAGW 1886 University of Maryland - College Park 4625
 OBSERVATIONS OF COMETS AND ASTEROIDS
Period *Obligations*
 04/10/1990-11/30/1994 FY94: \$134,978 TOTAL: \$702,518
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M F A'HEARN HQ/J H RAHE 11-Astronomy

NAGW 1269 University of Maryland - College Park 4618
 ATMOSPHERE-BIOSPHERE SYSTEM STUDIES USING MODELS
Period *Obligations*
 04/26/1988-12/31/1993 FY94: \$0 TOTAL: \$789,556
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P SELLERS HQ/G ASRAR 39-Env Sci, NEC
 J SHUKLA HQ/T J PIEPER

NAGW 1895 University of Maryland - College Park 4626
 CHEMICAL STUDIES ON THE ORIGIN OF LIFE
Period *Obligations*
 11/30/1989-09/30/1993 FY94: \$0 TOTAL: \$463,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C PONNAMPERUMA HQ/J D RUMMEL 12-Chemistry

NAGW 1346 University of Maryland - College Park 4619
 3 DIMENSIONAL CONSIDERATIONS OF SOLAR LOOP EQUILIBRIA
Period *Obligations*
 07/06/1988-11/30/1994 FY94: \$0 TOTAL: \$385,788
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J M FINN HQ/J D BOHLIN 13-Physics
 A B HASAM HQ/S KANE

NAGW 1967 University of Maryland - College Park 4627
 NAGW-1967/UNIV OF MD/PRIMARY PRODUCTION MODELLING IN THE SAHEL USING NOAA AVHRR DATA
Period *Obligations*
 02/16/1990-09/30/1994 FY94: \$0 TOTAL: \$385,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S D PRINCE HQ/G ASRAR 39-Env Sci, NEC
 HQ/T J PIEPER

NAGW 1471 University of Maryland - College Park 4620
 DEV AND APPLICATION OF REMOTE SENSING OF LONGWAVE HEATING
Period *Obligations*
 10/07/1988-07/31/1993 FY94: \$0 TOTAL: \$576,956
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R G ELLINGSON HQ/W HUNTRESS JR 31-Atmos Sci
 HQ/S G TILFORD

NAGW 1990 University of Maryland - College Park 4628
 RESEARCH ON TECHNIQUES FOR MEASUREMENTS OF THE COM POSITION OF SOLAR ENERGETIC PARTICLES
Period *Obligations*
 04/30/1990-10/31/1994 FY94: \$90,000 TOTAL: \$535,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G M MASON HQ/W V JONES 13-Physics
 HQ/J C LING

NAGW 1541 University of Maryland - College Park 4621
 RESEARCH IN SOLAR ASTRONOMY AT SHORT WAVELENGTHS
Period *Obligations*
 12/06/1988-10/31/1994 FY94: \$74,000 TOTAL: \$484,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M R KUNDU HQ/J D BOHLIN 13-Physics
 HQ/S KANE

NAGW 2062 University of Maryland - College Park 4629
 NAGW-2062/UNIV OF MARYLAND @ COLLEGE PARK/RESEARCH IN CHARGED PARTICLE TRANSPORT THEORY
Period *Obligations*
 05/05/1990-03/31/1995 FY94: \$30,000 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J A EARL HQ/W V JONES 13-Physics
 HQ/J C LING

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAGW 2079 University of Maryland - College Park 4630
 AN INVESTIGATION OF MAGNETIC RECONNECTION AND ASSOCIATED OBSERVATIONAL SIGNATURES IN COLL. PLASMA

Period	Obligations	
05/05/1990-05/31/1994	FY94: \$70,000	TOTAL: \$242,500
Prin. Invest.	NASA Tech. Officer	CASE Category
J F DRAKE	HQ/M M MELLOTT	13-Physics
	HQ/T PERRY	

NAGW 2168 University of Maryland - College Park 4631
 NAGW-2168/UNIV OF MD @ COLLEGE PARK/INVESTIGATION OF AURORAL SPECTRAL PROCESSES TO OPTIMIZE AURORAL

Period	Obligations	
07/20/1990-05/31/1994	FY94: \$0	TOTAL: \$102,000
Prin. Invest.	NASA Tech. Officer	CASE Category
W BENESCH	HQ/M M MELLOTT	13-Physics
	HQ/T PERRY	

NAGW 2172 University of Maryland - College Park 4632
 NAGW-2172/UNIV OF MD @ COLLEGE PARK/MILLIMETER WAVE IMAGING AND PATROL OBSERVATIONS OF THE SUN

Period	Obligations	
07/23/1990-06/30/1994	FY94: \$0	TOTAL: \$234,500
Prin. Invest.	NASA Tech. Officer	CASE Category
M R KUNDU	HQ/J D BOHLIN	13-Physics
	HQ/S KANE	

NAGW 2202 University of Maryland - College Park 4633
 HUMAN RESOURCES NEEDS FOR OCEANIC REMOTE SENSING: A PROPOSAL TO TRAIN FUTURE SCIENTISTS

Period	Obligations	
07/26/1990-03/31/1994	FY94: \$0	TOTAL: \$209,132
Prin. Invest.	NASA Tech. Officer	CASE Category
C F D'ELIA	HQ/M LEWIS	33-Oceanography

NAGW 2245 University of Maryland - College Park 4634
 TELEROBOTICS SPACE OPERATIONS RESEARCH

Period	Obligations	
10/01/1990-01/31/1995	FY94: \$450,059	TOTAL: \$4,681,836
Prin. Invest.	NASA Tech. Officer	CASE Category
D AKIN	HQ/L HOLCOMB	42-Astro Engr
	HQ/D LAVERY	

NAGW 2346 University of Maryland - College Park 4635
 INFRARED INVESTIGATIONS OF SOLAR SYSTEM ICES: TEMPERATURE DEPENDENCE OF OPTICAL CONSTANTS

Period	Obligations	
03/06/1991-10/31/1993	FY94: \$0	TOTAL: \$165,630
Prin. Invest.	NASA Tech. Officer	CASE Category
R J KHANNA	HQ/J T BERGSTRALH	11-Astronomy

NAGW 2504 University of Maryland - College Park 4636
 STUDY OF ENERGETIC PARTICLE PROCESSES IN THE HELIOSPHERE

Period	Obligations	
07/15/1991-04/30/1994	FY94: \$0	TOTAL: \$220,000
Prin. Invest.	NASA Tech. Officer	CASE Category
F B McDONALD	HQ/W V JONES	13-Physics
	HQ/J C LING	

NAGW 2661 University of Maryland - College Park 4637
 CLIMATE MODELING AND SIMULATION STUDIES

Period	Obligations	
08/12/1991-07/31/1993	FY94: \$0	TOTAL: \$371,736
Prin. Invest.	NASA Tech. Officer	CASE Category
J SHUKLA	HQ/K BERGMAN	99-Multi-Discip
	HQ/R A SCHIFFER	

NAGW 2664 University of Maryland - College Park 4638
 NAGW-2664/UNIV MD/PHYSICAL PROCESSES AND SCALE INTERACTIONS IN HIGH RESOLUTION CLIMATE SIMULATIONS

Period	Obligations	
09/17/1991-06/14/1993	FY94: \$0	TOTAL: \$120,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D STRAUS	HQ/K H BERGMAN	31-Atmos Sci
	HQ/R A SCHIFFER	

NAGW 2689 University of Maryland - College Park 4639
 NAGW-2689/UNIV MARYLAND @ COLLEGE PARK/THE UNITY OF ACTIVITY IN GALAXIES

Period	Obligations	
01/26/1993-09/30/1993	FY94: \$0	TOTAL: \$112,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A S WILSON	HQ/G S KUTTER	11-Astronomy
	HQ/G R RIEGLER	

NAGW 2696 University of Maryland - College Park 4640
 DIRECT MEASUREMENTS OF TROPOSPHERIC FROM OZONE TOMOS DATA

Period	Obligations	
09/06/1991-01/31/1995	FY94: \$58,458	TOTAL: \$262,439
Prin. Invest.	NASA Tech. Officer	CASE Category
R D HUDSON	HQ/J A KAYE	11-Astronomy
	HQ/R E MURPHY	

NAGW 2723 University of Maryland - College Park 4641
 GLOBAL MAPPING OF VEGETATIVE LAND COVER

Period	Obligations	
09/10/1991-08/14/1995	FY94: \$82,925	TOTAL: \$436,972
Prin. Invest.	NASA Tech. Officer	CASE Category
J R TOWNSHEND	HQ/R H WARING	39-Env Sci, NEC
	HQ/R E MURPHY	

NAGW 2760 University of Maryland - College Park 4642
 RADIO STUDIES OF CORONAL MASS EJECTIONS

Period	Obligations	
11/01/1991-10/31/1993	FY94: \$0	TOTAL: \$40,000
Prin. Invest.	NASA Tech. Officer	CASE Category
N GOPALSWAMY	HQ/W J WAGNER	13-Physics
	HQ/K LANG	

NAGW 2777 University of Maryland - College Park 4643
 A PROPOSAL FOR ESTABLISHMENT OF A NATIONAL AERONAUTICS AND SPACE ADMINISTRATION CENTER

Period	Obligations	
12/09/1991-06/30/1995	FY94: \$941,722	TOTAL: \$2,941,722
Prin. Invest.	NASA Tech. Officer	CASE Category
J BARAS	HQ/V CEVENINI	99-Multi-Discip
A EPHREIMIDES	HQ/C PITTMAN	

NAGW 2805 University of Maryland - College Park 4644
 EMERGENCE OF SELF-REPRODUCING STRUCTURES IN CELLULAR AUTOMATON

Period	Obligations	
01/17/1992-01/14/1995	FY94: \$154,478	TOTAL: \$446,846
Prin. Invest.	NASA Tech. Officer	CASE Category
J A REGGIA	HQ/J K ALEXANDER	51-Biological Sci
	HQ/D A HOLLAND	

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAGW 2889 University of Maryland - College Park 4645
AQUEOUS GEOCHEMISTRY AND SEDIMENTARY PROCESSES ON
EARLY MARS

<i>Period</i>	<i>Obligations</i>	
02/13/1992-02/28/1993	FY94: \$0	TOTAL: \$26,318
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M A'HEARN	HQ/J M BOYCE	19-Phys Sci, NEC

NAGW 2928 University of Maryland - College Park 4646
AN ANALYSIS OF TOPOGRAPHIC EFFECTS AND SCALING PRO
PERTIES

<i>Period</i>	<i>Obligations</i>	
12/14/1992-12/31/1994	FY94: \$100,000	TOTAL: \$285,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R DUBAYAH	HQ/R E MURPHY	19-Phys Sci, NEC
	HQ/D M BUTLER	

NAGW 2952 University of Maryland - College Park 4647
A EUROPEAN SUB-NODE FOR THE PDS SMALL BODIES NODE

<i>Period</i>	<i>Obligations</i>	
03/03/1992-12/31/1994	FY94: \$19,700	TOTAL: \$91,792
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M F A'HEARN	HQ/W L QUAIDE	11-Astronomy

NAGW 3066 University of Maryland - College Park 4648
A LABORATORY OBSERVATIONAL STUDY OF THE CHEMICAL E
VOOLUTION OF PROTOSTELLAR NEBULAE

<i>Period</i>	<i>Obligations</i>	
04/28/1992-12/31/1993	FY94: \$0	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L MUNDY	HQ/J A NUTH,III	19-Phys Sci, NEC

NAGW 3080 University of Maryland - College Park 4649
FRAGMENTATION AND MICROSTRUCTURE OF SOLAR FLARE
ENERGY RELEASE

<i>Period</i>	<i>Obligations</i>	
05/15/1992-12/31/1993	FY94: \$0	TOTAL: \$54,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M R KUNDU	HQ/W J WAGNER	13-Physics
	HQ/J D BOHLIN	

NAGW 3086 University of Maryland - College Park 4650
SEA LEVEL AND PRESSURE VARIATIONS IN THE WESTERN
TROPICAL ATLANTIC

<i>Period</i>	<i>Obligations</i>	
05/29/1992-05/31/1994	FY94: \$0	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A CARTON	HQ/D ADAMEC	33-Oceanography
	HQ/R A SCHIFFER	

NAGW 3178 University of Maryland - College Park 4651
NAGW-3178/UNIV MARYLAND/A SEMINAR IN COMPARATIVE
PLANETOLOGY

<i>Period</i>	<i>Obligations</i>	
01/26/1993-06/30/1993	FY94: \$0	TOTAL: \$23,300
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M A'HEARN	HQ/H C BRINTON	11-Astronomy

NAGW 3193 University of Maryland - College Park 4652
NAGW-3193/UNIV MARYLAND @ COLLEGE PARK/ABSORBED PH
OTOSYNTHETICALLY ACTIVE RADIATION AND SURFACE HEMIS

<i>Period</i>	<i>Obligations</i>	
09/24/1992-04/30/1994	FY94: \$0	TOTAL: \$100,781
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C L WALTHALL	HQ/D E WICKLAND	39-Env Sci, NEC
J R IRONS	HQ/R E MURPHY	
R HALTHORE		

NAGW 3222 University of Maryland - College Park 4653
NAGW-3222/UNIV MARYLAND @ COLLEGE PARK/STUDIES OF THE
WESTWARD ELECTROJET AND FIELD-ALIGNED CURRENTS

<i>Period</i>	<i>Obligations</i>	
10/21/1992-05/31/1995	FY94: \$34,565	TOTAL: \$89,231
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R LOPEZ	HQ/E C WIPPLE	13-Physics
	HQ/J D BOHLIN	

NAGW 3226 University of Maryland - College Park 4654
THE IMPACT OF ALTERNATIVE COMPOSITING PROCEDURES

<i>Period</i>	<i>Obligations</i>	
10/22/1992-09/30/1993	FY94: \$0	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J R TOWNSHEND	HQ/M F MAIDEN	39-Env Sci, NEC
	HQ/D M BUTLER	

NAGW 3235 University of Maryland - College Park 4655
NAGW-3235/UNIV MARYLAND @ COLLEGE PARK/DETECTING THE
LOCATION, SPATIAL EXTENT, RATES AND IMPACTS

<i>Period</i>	<i>Obligations</i>	
10/26/1992-12/31/1994	FY94: \$489,159	TOTAL: \$921,226
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J TOWNSHEND	HQ/M E MAIDEN	39-Env Sci, NEC
	HQ/D M BUTLER	

NAGW 3309 University of Maryland - College Park 4656
MONITORING MARS WATER VAPOR WITH THE VLA

<i>Period</i>	<i>Obligations</i>	
01/06/1993-11/30/1995	FY94: \$34,000	TOTAL: \$84,709
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A W GROSSMAN	HQ/G C BRINTON	11-Astronomy

NAGW 3456 University of Maryland - College Park 4657
PULSED ACCELERATION IN SOLAR FLARES

<i>Period</i>	<i>Obligations</i>	
04/02/1993-06/30/1996	FY94: \$58,549	TOTAL: \$114,501
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M J ASEHWANDEN	HQ/W J WAGNER	33-Oceanography
	HQ/J D BOHLIN	

NAGW 3526 University of Maryland - College Park 4658
NAGW-3526/UNIV MARYLAND/COSMIC RAY PROTON AND HELIUM
SPECTRA IN A BALLOON BORNE EXPERIMENT

<i>Period</i>	<i>Obligations</i>	
04/22/1993-03/01/1996	FY94: \$123,000	TOTAL: \$230,770
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E SEO	HQ/W V JONES	13-Physics
	HQ/G L WITHBROE	

NAGW 3588 University of Maryland - College Park 4659
AQUEOUS GEOCHEMISTRY, VOLCANOLOGY, AND THE EVOLUTI ON
OF THE MARTIAN ATMOSPHERE

<i>Period</i>	<i>Obligations</i>	
05/14/1993-02/28/1996	FY94: \$30,480	TOTAL: \$62,355
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M W SCHAEFER	HQ/J M BOYCE	32-Geological Sci

NAGW 3596 University of Maryland - College Park 4660
DYNAMICAL MODELING AND PREDICTION OF SUBSTORMS

<i>Period</i>	<i>Obligations</i>	
06/11/1993-01/31/1996	FY94: \$73,500	TOTAL: \$143,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A SHARMA	HQ/E C WIPPLE	13-Physics
	HQ/G L WITHBROE	

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NAGW 3598 University of Maryland - College Park 4661
 SURFACE COMPOSITION OF IO
Period *Obligations*
 05/26/1993-03/31/1996 FY94: \$60,295 TOTAL: \$115,283
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R KHANNA HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3625 University of Maryland - College Park 4662
 RE-OS ISOTOPE INVESTIGATION OF METEORITES
Period *Obligations*
 06/03/1993-07/31/1995 FY94: \$63,603 TOTAL: \$130,553
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R WALKER HQ/J BOYCE 32-Geological Sci

NAGW 3640 University of Maryland - College Park 4663
 CRYOGENIC MONOCRYSTALLINE OPTICAL CAVITY FOR LASER
 STABILIZATION AND PRECISE TIME MEASUREMENTS
Period *Obligations*
 06/15/1993-03/31/1995 FY94: \$55,000 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J RICHARD HQ/R V STACHNIK 11-Astronomy
 HQ/E J WEILER

NAGW 3715 University of Maryland - College Park 4664
 CENTER FOR HYPERSONIC EDUCATION AND RESEARCH
Period *Obligations*
 08/24/1993-08/31/1995 FY94: \$149,994 TOTAL: \$199,994
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J LEWIS HQ/S M WANDER 49-Engr, NEC

NAGW 3729 University of Maryland - College Park 4665
 EVOLUTION OF AEROSOL SIZE DISTRIBUTION IN THE CLOUDY
 BOUNDARY LAYER
Period *Obligations*
 09/09/1993-08/31/1996 FY94: \$0 TOTAL: \$69,843
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G BLUTH HQ/M BALTUCK 31-Atmos Sci
 HQ/A C JANETOS

NAGW 3758 University of Maryland - College Park 4666
 MONITORING AND MODELING THE DYNAMICS OF COASTAL MARSHES:
 REGIONAL APPROACH USING LANDSAT DATA
Period *Obligations*
 09/29/1993-09/30/1994 FY94: \$199,884 TOTAL: \$199,884
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J TOWNSHEND HQ/D M BUTLER 39-Env Sci, NEC

NAGW 3771 University of Maryland - College Park 4667
 SUPPORT OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
 AVHRR PATHFINDER DATA SET PRODUCTION
Period *Obligations*
 10/12/1993-05/31/1995 FY94: \$39,025 TOTAL: \$39,025
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J R TOWNSHEND HQ/M E MAIDEN 39-Env Sci, NEC
 HQ/D M BUTLER

NAGW 3791 University of Maryland - College Park 4668
 NUCLEAR ELECTRIC PROPULSION SPACE TEST
Period *Obligations*
 10/28/1993-08/30/1994 FY94: \$138,071 TOTAL: \$138,071
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R SAGDEEV HQ/L J KALUZIENSKI 11-Astronomy
 HQ/A N BUNNER

NAGW 4000 University of Maryland - College Park 4669
 NAGW-4000/B UNIV. MD AT COLLEGE PARK 12 MO. 'ORGAN. AND
 COORD. OF SYMPOSIUM ON THE VALUE.'
Period *Obligations*
 05/14/1994-04/30/1995 FY94: \$74,993 TOTAL: \$74,993
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C S LIU HQ/C B PILCHER 99-Multi-Discip

NAGW 4010 University of Maryland - College Park 4670
 MICROWAVE OBSERVATIONS OF JUPITER'S DEEP ATMOSPHERE AND
 CONSEQUENCES OF THE IMPACT OF COMET SHOEMAK
Period *Obligations*
 05/25/1994-02/15/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A GROSSMAN HQ/J H RAHE 11-Astronomy

NAGW 4034 University of Maryland - College Park 4671
 RANGER TELEROBOTICS FLIGHT EXPERIMENT
Period *Obligations*
 06/17/1994-01/31/1995 FY94: \$2,750,049 TOTAL: \$2,750,049
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D L AKIN HQ/D B LAVERY 42-Astro Engr

NAGW 4070 University of Maryland - College Park 4672
 SEARCH FOR CN EMISSION IN PLANET CROSSING ASTEROID S
Period *Obligations*
 07/12/1994-12/31/1994 FY94: \$96,000 TOTAL: \$96,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L MCFADDEN HQ/J H RAHE 11-Astronomy

NAGW 4094 University of Maryland - College Park 4673
 PRECOLLEGE SCIENCE EDUCATION WORKSHOP
Period *Obligations*
 08/01/1994-04/01/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R E LOPEZ HQ/M V PHELPS 99-Multi-Discip

NAS 3-25370 University of Maryland - College Park 4674
 CRITICAL FLUID LIGHT SCATTERING EXPERIMENTS (ZENO)
Period *Obligations*
 12/22/1988-04/06/1995 FY94: \$1,150,000 TOTAL: \$21,778,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R W GAMMON LERC/R W LAUVER 13-Physics

NAS 5-29163 University of Maryland - College Park 4675
 PROVIDE SUPPORT FOR SCIENTIFIC PERSONNEL PARTICIPATION
 IN THE COOPERATIVE VISITORS PROGRAM
Period *Obligations*
 05/17/1993-10/30/1992 FY94: \$0 TOTAL: \$535,033
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F BAER GSFC/E R KREINS 31-Atmos Sci

NAS 5-30370 University of Maryland - College Park 4676
 SOLAR WIND AND SUPERHERMAL ION COMPOSITION
 INSTRUMENT
Period *Obligations*
 03/10/1989-08/16/1995 FY94: \$164,900 TOTAL: \$4,311,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S GLOECKLER GSFC/D CROSBY 41-Aero Engr

NASA'S UNIVERSITY PROGRAM **MARYLAND (Continued)**

NAS 5-30704 University of Maryland - College Park 4677
 LETTER CONTRACT FOR SOLAR ANOMALOUS AND
 MAGNETOSPHERIC
Period *Obligations*
 08/02/1989-07/31/1995 FY94: \$1,125,000 TOTAL: \$8,559,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G M MASON GSFC/W R NAGEL 13-Physics

NAS 5-30927 University of Maryland - College Park 4678
 REFURBISH AND FABRICATE STEP INSTRUMENT
Period *Obligations*
 07/03/1990-11/16/1994 FY94: \$85,000 TOTAL: \$923,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G M MASON GSFC/T VON ROSENINGE 31-Atmos Sci

NAS 5-31166 University of Maryland - College Park 4679
 ISTP INVESTIGATION DEFINITION PHASE SOHO'S CELIAS
Period *Obligations*
 06/01/1990-07/01/1995 FY94: \$736,000 TOTAL: \$2,943,100
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F IPAVICH GSFC/L CHRISTENSEN 31-Atmos Sci

NAS 5-31365 University of Maryland - College Park 4680
 EOS EXECUTION PHASE
Period *Obligations*
 01/02/1992-12/14/2001 FY94: \$345,000 TOTAL: \$766,790
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C JUSTICE GSFC/H OSEROFF 39-Env Sci, NEC

NAS 5-31732 University of Maryland - College Park 4681
 R AND D STUDIES IN BIOSPHERE-ATOMOSPHERE INTERACTIONS
Period *Obligations*
 11/22/1991-12/31/1999 FY94: \$133,700 TOTAL: \$551,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C JUSTICE GSFC/P SELLERS 31-Atmos Sci

NAS 8-38137 University of Maryland - College Park 4682
 DEVELOPEMNT OF A 3 AXIS SUPERCONDUCTING GRAVITY
 GRADIOMETER FOR SPACE- BORNE GRAVITY SURVEY
Period *Obligations*
 06/29/1989-02/31/1995 FY94: \$0 TOTAL: \$1,538,669
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 H J PAIK MSFC/S H MORGAN JR. 42-Astro Engr
 M V MOODY

NASW 4885 University of Maryland - College Park 4683
 IN-STEP PROGRAM PHASE A AWARD
Period *Obligations*
 05/12/1994-02/12/1995 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 H J PAIK HQ/J LANDERS 99-Multi-Discip

NCA 2-611 University of Maryland - College Park 4684
 AEROTHEROMODYNAMICS AND CONTROL STUDIES OF A WAVER
 IDER-BASED VEHICLE
Period *Obligations*
 05/14/1991-04/30/1993 FY94: \$0 TOTAL: \$79,821
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J LEWIS ARC/J BOWLES 41-Aero Engr

NCA 2-624 University of Maryland - College Park 4685
 NUMERICAL EXPERIMENTS CONCERNING THE UNSTEADY FLOW
 IN HYPERSONIC IMPULSE FACILITIES
Period *Obligations*
 06/17/1991-12/31/1993 FY94: \$0 TOTAL: \$39,634
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J LEWIS ARC/G S DEIWERT 41-Aero Engr
 J D ANDERSON

NCC 2-829 University of Maryland - College Park 4686
 EVALUATION OF METHODOLGY FOR TESTING AND ANALYSIS OF
 ADVANCED ROTORS
Period *Obligations*
 09/30/1993-12/31/1994 FY94: \$40,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 I CHOPRA ARC/W G WARMBRODT 41-Aero Engr
 F HARRIS ARC/F FELKER

NCC 2-5003 University of Maryland - College Park 4687
 THE VELOCITY AND VORTICITY FIELDS OF THE TURBULENT NEAR
 WAKE OF A CIRCULAR CYLINDER
Period *Obligations*
 09/28/1993-10/31/1994 FY94: \$0 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J M WALLACE ARC/P MOIN 41-Aero Engr

NCC 2-5010 University of Maryland - College Park 4688
 STABILITY AND CONTROL STUDIES OF A WAVERIDER-BASED
 VEHICLE
Period *Obligations*
 10/29/1993-03/31/1994 FY94: \$10,284 TOTAL: \$10,284
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J LEWIS ARC/J BOWLES 41-Aero Engr

NCC 5-26 University of Maryland - College Park 4689
 ANALYSIS OF TERRESTRIAL CONDITIONS AND DYNAMICS
Period *Obligations*
 12/01/1982-10/31/1994 FY94: \$0 TOTAL: \$1,546,486
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N GOWARD GSFC/E M MIDDLETON 31-Atmos Sci
 C WALTHALL GSFC/C J TUCKER

NCC 5-35 University of Maryland - College Park 4690
 RESEARCH RELATIVE TO ATMOSPHERIC PHYSICS AND
 SPACECRAFT APPLICATIONS STUDIES
Period *Obligations*
 11/14/1985-01/31/1995 FY94: \$44,700 TOTAL: \$4,221,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S W GREENWOOD GSFC/W R HOEGY 19-Phys Sci, NEC
 GSFC/F HERRERO

NCC 5-39 University of Maryland - College Park 4691
 RESEARCH ATMOSPHERIC SCIENCES--SUMMER INSTITUTE
Period *Obligations*
 07/15/1988-04/30/1995 FY94: \$81,611 TOTAL: \$674,724
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F BAER GSFC/E R KREINS 31-Atmos Sci

NCC 5-54 University of Maryland - College Park 4692
 COOPERATIVE RESEARCH IN SATELLITE BASED STUDIES OF
 PHOTONS AND CHARGED PARTICLES
Period *Obligations*
 08/04/1993-08/14/1995 FY94: \$853,277 TOTAL: \$1,667,447
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J TRASCO GSFC/A K HARDING 13-Physics

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NCC 5-55 University of Maryland - College Park 4693
 JOINT CENTER FOR EARTH SYSTEM SCIENCE
Period Obligations
 09/22/1993-10/31/1994 FY94: \$443,921 TOTAL: \$443,921
Prin. Invest. NASA Tech. Officer CASE Category
 R D HUDSON GSFC/F EINAUDI 11-Astronomy
 GSFC/C E COTE

NCC 5-58 University of Maryland - College Park 4694
 STUDY OF IMPACT CRATERS ON THE TERRESTRIAL PLANETS
Period Obligations
 10/22/1993-10/31/1994 FY94: \$5,005 TOTAL: \$5,005
Prin. Invest. NASA Tech. Officer CASE Category
 C C SCHNETZLER GSFC/J B GARVIN 32-Geological Sci

NCC 5-59 University of Maryland - College Park 4695
 UNIVERSITY OF MARYLAND PROGRAM IN TERRESTRIAL AND
 PLANETARY GEOLOGY AND GEOPHYSICS
Period Obligations
 11/15/1993-11/14/1994 FY94: \$34,963 TOTAL: \$34,963
Prin. Invest. NASA Tech. Officer CASE Category
 M SCHAEFER GSFC/S COHEN 11-Astronomy

NCC 5-60 University of Maryland - College Park 4696
 COOPERATIVE RESEARCH IN SPACE GEODESY AND CRUSTAL
 DYNAMICS
Period Obligations
 12/06/1993-12/14/1994 FY94: \$342,940 TOTAL: \$342,940
Prin. Invest. NASA Tech. Officer CASE Category
 E C PAVLIS GSFC/P MC CLAIN 11-Astronomy
 J D TRASCO

NCC 8-25 University of Maryland - College Park 4697
 GAMMA RAY STUDIES
Period Obligations
 09/10/1993-09/10/1994 FY94: \$0 TOTAL: \$31,299
Prin. Invest. NASA Tech. Officer CASE Category
 R SAGDEEV MSFC/G FISHMAN 11-Astronomy

NCCW 38 University of Maryland - College Park 4698
 EVA INSTRUMENTATION FLIGHT EXPERIMENT
Period Obligations
 03/08/1994-02/28/1995 FY94: \$99,834 TOTAL: \$99,834
Prin. Invest. NASA Tech. Officer CASE Category
 D L AKIN HQ/R A GUALDONI 41-Aero Engr
 B SORENSON

NCCW 39 University of Maryland - College Park 4699
 NCCW-0039/B UNIV. OF MD COLLEGE PK 'FLIGHT TESTING OF A
 WATER CAPILLARY PUMPED LOOP' 12-MONTH AWARD
Period Obligations
 03/30/1994-04/30/1995 FY94: \$45,100 TOTAL: \$45,100
Prin. Invest. NASA Tech. Officer CASE Category
 K R KOLOS HQ/R GUALDONI 13-Physics

NGT 00-030-038 University of Maryland - College Park 4700
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 08/23/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 Y QIAN HQ/D M BUTLER 22-Computer Science
 F BAER HQ/G S WILSON

NGT 00-030-089 University of Maryland - College Park 4701
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 09/19/1991-12/31/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 D O FULLER HQ/D M BUTLER 39-Env Sci, NEC
 S D PRINCE HQ/G S WILSON

NGT 00-030-130 University of Maryland - College Park 4702
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 10/21/1992-08/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 A C SOFFER HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NGT 00-030-168 University of Maryland - College Park 4703
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 08/23/1993-08/31/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 S D PRINCE HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NGT 00-030-201 University of Maryland - College Park 4704
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 08/27/1993-08/31/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 J R TOWNSHEND HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NGT 00-030-242 University of Maryland - College Park 4705
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 09/22/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 H SOMET HQ/E LUCIER 22-Computer Science
 HQ/G ASRAR

NGT 00-030-276 University of Maryland - College Park 4706
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 09/22/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 S NIGAM HQ/J S THEON 39-Env Sci, NEC
 HQ/G ASRAR

NGT 00-050-424 University of Maryland - College Park 4707
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/04/1989-08/14/1993 FY94: \$0 TOTAL: \$84,000
Prin. Invest. NASA Tech. Officer CASE Category
 J S BARAS HQ/F C OWENS 49-Engr, NEC

NGT 00-050-658 University of Maryland - College Park 4708
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/12/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 D C HAMILTON HQ/F C OWENS 13-Physics

NASA'S UNIVERSITY PROGRAM
MARYLAND (Continued)

NGT 00-050-718 University of Maryland - College Park 4709
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/15/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L KANAL	HQ/F C OWENS	21-Mathematics

NGT 00-051-017 University of Maryland - College Park 4718
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
05/13/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
M DAGENAIS	GSFC/G SOFFEN	45-Elec Engr

NGT 00-050-721 University of Maryland - College Park 4710
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
04/30/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R RAMATY	HQ/F C OWENS	13-Physics

NGT 00-051-096 University of Maryland - College Park 4719
 GRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

Period	Obligations	
07/07/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R MUSHOTZKY	GSFC/M BURRELL	11-Astronomy

NGT 00-050-762 University of Maryland - College Park 4711
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/01/1991-06/30/1993	FY94: \$0	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
B SHNEIDERMAN	HQ/F C OWENS	22-Computer Science

NGT 00-051-181 University of Maryland - College Park 4720
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/29/1993-08/31/1996	FY94: \$44,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L W HARDING	GSFC/M BURRELL	33-Oceanography

NGT 00-050-763 University of Maryland - College Park 4712
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
11/26/1991-06/30/1993	FY94: \$0	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R RAMATY	GSFC/G SOFFEN	13-Physics

NGT 00-060-006 University of Maryland - College Park 4721
 SUMMER FACULTY FELLOWSHIP PROGRAM

Period	Obligations	
05/07/1991-03/31/1994	FY94: \$13,000	TOTAL: \$835,318
Prin. Invest.	NASA Tech. Officer	CASE Category
H R BOROSON	HQ/A S MCGEE	49-Engr, NEC
	HQ/E T SCHWARTZ	

NGT 00-050-764 University of Maryland - College Park 4713
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
11/08/1991-06/30/1993	FY94: \$0	TOTAL: \$41,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A S WILSON	GSFC/G SOFFAN	11-Astronomy

NGT 00-060-010 University of Maryland - College Park 4722
 SUMMER FACULTY FELLOWSHIP PROGRAM

Period	Obligations	
04/26/1994-12/31/1994	FY94: \$512,573	TOTAL: \$512,573
Prin. Invest.	NASA Tech. Officer	CASE Category
H R BOROSON	HQ/J T LYNCH	11-Astronomy

NGT 00-050-808 University of Maryland - College Park 4714
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/16/1991-06/30/1993	FY94: \$0	TOTAL: \$41,586
Prin. Invest.	NASA Tech. Officer	CASE Category
R A BELL	HQ/J ALEXANDER	11-Astronomy

NGT 00-070-283 University of Maryland - College Park 4723
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
06/15/1992-06/30/1994	FY94: \$0	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
C GREBOGI	GSFC/B SOFFEN	21-Mathematics

NGT 00-050-926 University of Maryland - College Park 4715
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/15/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
K E HEROLD	GSFC/G SOFFEN	46-Mech Engr

NGT 00-070-321 University of Maryland - College Park 4724
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
06/29/1993-07/31/1995	FY94: \$22,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
M C RABENHORST	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-050-951 University of Maryland - College Park 4716
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/14/1992-08/31/1995	FY94: \$22,000	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J JAJA	GSFC/G SOFFEN	45-Elec Engr

NSG-5123 University of Maryland - College Park 4725
 EVALUATION OF SOFTWARE ENGR DISCIPLINES

Period	Obligations	
08/01/1976-09/30/1994	FY94: \$420,000	TOTAL: \$3,089,292
Prin. Invest.	NASA Tech. Officer	CASE Category
V R BASILI	GSFC/R PAJERSKI	22-Computer Science
D H ROMBACH		
M V ZELKOWITZ		

NGT 00-050-957 University of Maryland - College Park 4717
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/26/1992-07/31/1995	FY94: \$22,000	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A GALVIN	HQ/J K ALEXANDER	13-Physics

NASA'S UNIVERSITY PROGRAM **MARYLAND (Continued)**

NCA 5-99 University of Maryland - Eastern Shore 4726

ENGINEERING AND PRE-ENGINEERING ACTIVITIES

Period	Obligations	
06/15/1982-05/31/1994	FY94: \$	TOTAL: \$522,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R E MULLER	GSFC/D MENCHAN	45-Elec Engr
	GSFC/J W CHAPMAN	

NGT 00-090-045 University of Maryland - Eastern Shore 4727

UNDERGRADUATE STUDENT RESEARCHERS PRG

Period	Obligations	
08/21/1991-08/31/1994	FY94: \$0	TOTAL: \$123,093
Prin. Invest.	NASA Tech. Officer	CASE Category
B ANDERSON	HQ/B WHITE	49-Engr, NEC

NAG 5-2194 University of Maryland Baltimore County 4728

ADAPTIVE PHASE ALIGNMENT OF SYNTHETIC APERTURES FO R COHERENT OPTICAL COMMUNICATIONS

Period	Obligations	
02/09/1993-02/14/1995	FY94: \$73,214	TOTAL: \$148,100
Prin. Invest.	NASA Tech. Officer	CASE Category
J M MORRIS	GSFC/B D SEERY	45-Elec Engr

NAG 5-2379 University of Maryland Baltimore County 4729

A STUDY OF GIS FIELD MEASUREMENT TECHNIQUES FOR LO NG-TERM MONITORING OF BOREAL FOREST ECOSYSTEMS

Period	Obligations	
09/23/1993-09/30/1994	FY94: \$11,755	TOTAL: \$11,755
Prin. Invest.	NASA Tech. Officer	CASE Category
T W FORESMAN	GSFC/F G HALL	39-Env Sci, NEC
	GSFC/P J SELLERS	

NAG 5-2407 University of Maryland Baltimore County 4730

A STUDY OF THE ROLES OF IMAGE PROCESSING, GIS AND VISUALIZATION IN REMOTE SENSING RESEARCH

Period	Obligations	
10/29/1993-07/31/1994	FY94: \$94,752	TOTAL: \$94,752
Prin. Invest.	NASA Tech. Officer	CASE Category
T W FORESMAN	GSFC/L M STUART	39-Env Sci, NEC

NCC 5-57 University of Maryland Baltimore County 4731

NEURAL NETWORKS AND RELATED METHODS FOR ATMOSPHERI C RETRIEVALS

Period	Obligations	
10/07/1993-10/14/1994	FY94: \$21,185	TOTAL: \$21,185
Prin. Invest.	NASA Tech. Officer	CASE Category
H MOTTELER	GSFC/J SUSSKIND	31-Atmos Sci

NCC 5-76 University of Maryland Baltimore County 4732

A STUDY OF DIGITAL LAND RESEARCH TECHNIQUES USING THE SUDBURY BASIN, ONTARIO AS A CASE STUDY

Period	Obligations	
08/01/1994-07/31/1995	FY94: \$43,027	TOTAL: \$43,027
Prin. Invest.	NASA Tech. Officer	CASE Category
P M MASOUKA	GSFC/J WELKER	19-Phys Sci, NEC
T W FORESMAN	GSFC/L STEWART	

NGT 00-070-331 University of Maryland Baltimore County 4733

NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
06/29/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J VINCENT	HQ/D K RUSSELL	12-Chemistry

MASSACHUSETTS

NAG 1-955 Boston College 4734

ENHANCEMENT OF SOLID-STATE INFRARED LASER OUTPUT VIA INTERIONIC ENERGY TRANSFER

Period	Obligations	
01/17/1989-11/30/1994	FY94: \$38,141	TOTAL: \$193,091
Prin. Invest.	NASA Tech. Officer	CASE Category
B DIBARTOLO	LARC/P BROCKMAN	13-Physics

NGT 00-050-996 Boston College 4735

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/20/1992-08/31/1995	FY94: \$22,000	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R L CORNVILLANN	HQ/J K ALEXANDER	13-Physics

NAG 1-1580 Boston University 4736

SONIC BOOMS IN THE TURBULENT ATMOSPHERE

Period	Obligations	
02/18/1994-02/16/1995	FY94: \$70,000	TOTAL: \$70,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A D PIERCE	LARC/G L MCANINCH	41-Aero Engr

NAG 2-747 Boston University 4737

FIFI IMAGING OF FINE STRUCTURE LINES IN THE NGC633 4 MOLECULAR CLOUD COMPLEX

Period	Obligations	
01/16/1992-03/31/1993	FY94: \$0	TOTAL: \$47,396
Prin. Invest.	NASA Tech. Officer	CASE Category
A P LANE	ARC/C D LAUGHLIN	11-Astronomy
J M JACKSON	ARC/C M GILLESPIE	

NAG 5-640 Boston University 4738

NEAR EARTH SPACE ENVIRONMENT EXPERIMENT

Period	Obligations	
01/08/1987-12/31/1994	FY94: \$0	TOTAL: \$765,586
Prin. Invest.	NASA Tech. Officer	CASE Category
M MENDILLO	GSFC/L J EARLY	13-Physics
	GSFC/R H PLESS	

NAG 5-690 Boston University 4739

A SOUNDING ROCKET PROGRAM IN EXTREME AND FAR UV INTERFEROMETRY

Period	Obligations	
04/29/1992-04/30/1995	FY94: \$275,000	TOTAL: \$792,000
Prin. Invest.	NASA Tech. Officer	CASE Category
S CHAKRABARTI	GSFC/R H PLESS	13-Physics

NAG 5-694 Boston University 4740

PARTICIPATION IN THE GEMINI ROCKET PROGRAM

Period	Obligations	
06/19/1992-12/31/1993	FY94: \$0	TOTAL: \$70,000
Prin. Invest.	NASA Tech. Officer	CASE Category
S CHAKRABARTI	GSFC/L J EARLY	13-Physics
	GSFC/R H PLESS	

NAG 5-695 Boston University 4741

A COLLIDING PHOTOIONIZATION SOLAR SPECTROMETER

Period	Obligations	
09/10/1992-05/31/1995	FY94: \$150,000	TOTAL: \$270,000
Prin. Invest.	NASA Tech. Officer	CASE Category
S CHAKRABARTI	GSFC/L J EARLY	13-Physics
	GSFC/R H PLESS	

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAG 5-1566	Boston University	4742	GAMMA RAY EMISSION FROM RADIO-LOUD QUASARS
<i>Period</i>	<i>Obligations</i>		
04/17/1991-11/14/1993	FY94: \$0	TOTAL: \$108,777	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A P MARSCHER	GSFC/J NORRIS	11-Astronomy	
	GSFC/D A KNIFFEN		
NAG 5-1943	Boston University	4743	ROSAT/VLBI/JCMT OBSERVATIONS OF FLAT SPECTRUM RADIO SOURCES
<i>Period</i>	<i>Obligations</i>		
03/16/1992-03/31/1995	FY94: \$30,000	TOTAL: \$75,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A P MARSCHER	GSFC/R PETRE	11-Astronomy	
NAG 5-1997	Boston University	4744	LOW MASS STARS IN BOK GLOBULES
<i>Period</i>	<i>Obligations</i>		
06/12/1992-06/14/1995	FY94: \$29,600	TOTAL: \$58,091	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D P CLEMENS	GSFC/D WEST	11-Astronomy	
NAG 5-2028	Boston University	4745	GAMMA-RAY EMISSION FROM THE STARBURST GALAXY NGC 253
<i>Period</i>	<i>Obligations</i>		
07/08/1992-07/14/1994	FY94: \$0	TOTAL: \$50,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J M JACKSON	GSFC/J P NORRIS	11-Astronomy	
	GSFC/N WHITE		
NAG 5-2115	Boston University	4746	STUDY OF ENERGY TRANSFER THROUGH THE EARTH'S MAGNETOSPHERE USING ISTEP ION COMPOSITION MEASUREMENTS
<i>Period</i>	<i>Obligations</i>		
09/28/1992-09/30/1993	FY94:	TOTAL: \$59,772	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T FRITZ	GSFC/M ACUNA	13-Physics	
	GSFC/T S TAYLOR		
NAG 5-2260	Boston University	4747	FIRST MEASUREMENTS OF HELIUM ON MARS
<i>Period</i>	<i>Obligations</i>		
05/04/1993-11/14/1994	FY94: \$0	TOTAL: \$90,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S CHAKRABARTI	GSFC/D WEST	11-Astronomy	
NAG 5-2266	Boston University	4748	CLUSTER RAPID IMAGING ELECTRON SPECTROMETER EFFORT
<i>Period</i>	<i>Obligations</i>		
05/07/1993-11/14/1994	FY94: \$51,000	TOTAL: \$119,400	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T A FRITZ	GSFC/M L GOLDSTEIN	13-Physics	
NAG 5-2508	Boston University	4749	INVESTIGATION OF HIGH ENERGY GAMMA-RAY EMISSION FROM AGN'S: A DEEP EXPOSURE AT HIGH GALACTIC LATITUDE
<i>Period</i>	<i>Obligations</i>		
02/10/1994-02/28/1995	FY94: \$101,312	TOTAL: \$101,312	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A P MARSCHER	GSFC/J P NORRIS	11-Astronomy	
R C HARTMAN	GSFC/N WHITE		
NAG 5-2578	Boston University	4750	GGP POLAR CAMMICE FLIGHT PREPARATION AND TEST PHASE
<i>Period</i>	<i>Obligations</i>		
04/14/1994-12/31/1994	FY94: \$50,000	TOTAL: \$50,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T A FRITZ	GSFC/M H ACUNA	13-Physics	
NAG 5-2643	Boston University	4751	HIRES DUST IMAGING OF THE NGC 6334 COMPLEX
<i>Period</i>	<i>Obligations</i>		
07/05/1994-07/14/1995	FY94: \$33,000	TOTAL: \$33,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J M JACKSON	GSFC/D WEST	11-Astronomy	
NAG 8-1053	Boston University	4752	DEVELOPMENT AND EVALUATION OF MULTILAYER COATINGS FOR IMAGER ABOARD IMI
<i>Period</i>	<i>Obligations</i>		
03/10/1994-02/28/1995	FY94: \$70,645	TOTAL: \$70,645	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S GHAKRABARTI	MSFC/C L JOHNSON	31-Atmos Sci	
NAGW 1627	Boston University	4753	MAGNETOSPHERIC SUBSTORMS
<i>Period</i>	<i>Obligations</i>		
03/13/1989-07/31/1995	FY94: \$60,000	TOTAL: \$348,285	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W J HUGHES	HQ/M M MELLOTT	13-Physics	
	HQ/T W PERRY		
NAGW 1629	Boston University	4754	ACTIVE EXPERIMENTS: NEW APPROACHES TO ANALYSIS
<i>Period</i>	<i>Obligations</i>		
03/02/1989-02/28/1995	FY94: \$0	TOTAL: \$456,250	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M MENDILLO	HQ/M M MELLOTT	13-Physics	
	HQ/T W PERRY		
NAGW 2138	Boston University	4755	MAGPIE: A MAGNETIC PASSIVE ISOTOPE EXPERIMENT
<i>Period</i>	<i>Obligations</i>		
07/30/1990-02/28/1995	FY94: \$120,000	TOTAL: \$540,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S P AHLEN	HQ/W V JONES	13-Physics	
	HQ/J C LING		
NAGW 2627	Boston University	4756	NAGW-2627/BOSTON UNIV/CONFIGURATION OF THE NEAR-EARTH PLASMA SHEET
<i>Period</i>	<i>Obligations</i>		
08/19/1991-05/31/1995	FY94: \$22,000	TOTAL: \$234,837	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G M ERICKSON	HQ/M M MELLOTT	13-Physics	
	HQ/J D BOHLIN		
NAGW 2679	Boston University	4757	STUDIES OF JUPITER'S SODIUM MAGNETO-NEBULA AND OTHER POSSIBLE EXTENDED STRUCTURES
<i>Period</i>	<i>Obligations</i>		
07/26/1991-04/30/1993	FY94: \$30,000	TOTAL: \$278,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M MENDILLO	HQ/M M MELLOTT	13-Physics	
	HQ/J D BOHLIN		

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAGW 2856 Boston University 4758
THE INFLUENCE OF GLOBAL CONVECTION ON REGION-1 BIR
KELAND CURRENT STRUCTURE
Period *Obligations*
01/31/1992-03/31/1995 FY94: \$58,000 TOTAL: \$168,484
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G M ERICKSON HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 2890 Boston University 4759
RING MICROSIGNATURES AT NEPTUNE
Period *Obligations*
02/19/1992-09/30/1994 FY94: \$0 TOTAL: \$67,034
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W J HUGHES HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 3059 Boston University 4760
NAGW-3059/BOSTON UNIV/FURTHER DEVELOPMENT OF THE
EUV/FUV SPATIAL HETERODYNE INTERFEROMETER
Period *Obligations*
05/06/1992-02/28/1993 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S CHAKRABARTI HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3876 Boston University 4761
BOSTON UNIV IMAGING SCIENCE IN VEST. OF THE MOON'S
EXTENDED ATMOSPHERE
Period *Obligations*
02/25/1994-02/28/1995 FY94: \$38,400 TOTAL: \$38,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M MENDILLO HQ/J H RAHE 11-Astronomy

NAGW 3953 Boston University 4762
STUDIES OF WESTWARD ELECTROJETS AND FIELD-ALIGNED
CURRENTS IN THE MAGNETOTAIL DURING SUBSTORMS...
Period *Obligations*
04/25/1994-02/28/1995 FY94: \$19,959 TOTAL: \$19,959
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H E SPENCE HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 3998 Boston University 4763
CRRES DATA SETS - A COORDINATED STUDY OF IONOSPHERIC
PLASMA INSTABILITIES SPANNING THE EQUATOR
Period *Obligations*
05/14/1994-06/30/1995 FY94: \$49,000 TOTAL: \$49,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M MENDILLO HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 4024 Boston University 4764
SPIFI THE SOUTH PLE IMAGING FABRY PEROT
Period *Obligations*
05/24/1994-04/30/1995 FY94: \$28,251 TOTAL: \$28,251
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M JACKSON HQ/L J CAROFF 11-Astronomy
HQ

NAGW 4085 Boston University 4765
THE PULSAUR-II IMAGING ELECTRON SPECTROMETER DATA
REDUCTION AND ANALYSIS
Period *Obligations*
07/19/1994-03/31/1995 FY94: \$12,000 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A FRITZ HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAS 5-31369 Boston University 4766
MODERATE RESOLUTION IMAGING SPECTROMETER
INVESTIGATION - LAND COVER CHANGES
Period *Obligations*
12/30/1991-12/14/2001 FY94: \$410,000 TOTAL: \$798,440
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W STRAHLER GSFC/H OSEROFF 31-Atmos Sci

NAS 8-36324 Boston University 4767
STUDY ENTITLED RELEASES TO INDUCE PLASMA INSTABILITIES
AT THE EQUATOR
Period *Obligations*
04/16/1985-09/30/1994 FY94: \$0 TOTAL: \$2,654,918
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M MENDILLO MSFC/D L REASONER 31-Atmos Sci

NGT 00-050-878 Boston University 4768
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/14/1992-05/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T G BIFANO MSFC/F SIX 46-Mech Engr

NGT 00-051-333 Boston University 4769
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S CHAKRABARTI HQ/D HOLLAND 11-Astronomy

NAG 9-515 Brandeis University 4770
SENSORY MOTOR CONTROL AND MOTION SICKNESS IN AN
ARTIFICIAL GRAVITY ENVIRONMENT
Period *Obligations*
05/10/1991-04/01/1994 FY94: \$0 TOTAL: \$1,138,375
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LACKNER JSC/D L HARM 56-Medical Sciences
P DIZIO

NAGW 4065 Brandeis University 4771
SENSORY-MOTOR CONTROL AND MOTION SICKNESS IN AN AR
TIFICIAL GRAVITY ENVIRONMENT
Period *Obligations*
06/29/1994-03/31/1995 FY94: \$375,000 TOTAL: \$375,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R LACKNER HQ/F R SULZMAN 51-Biological Sci

NGT 00-051-078 Brandeis University 4772
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/03/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H ROBERTS HQ/D HOLLAND 42-Astro Engr

NAG 8-1011 Bridgewater State College 4773
JOVE
Period *Obligations*
11/19/1993-12/31/1994 FY94: \$31,000 TOTAL: \$31,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J SULONOWSKI MSFC/F SIX 31-Atmos Sci
R ENRIGHT

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAG 3-1402 Clark University 4774
ABSOLUTE AND CONVECTIVE INSTABILITY OF A LIQUID JET AT MICROGRAVITY
Period Obligations
12/29/1992-12/31/1994 FY94: \$67,300 TOTAL: \$136,300
Prin. Invest. NASA Tech. Officer CASE Category
S P LIN LERC/M E HILL 19-Phys Sci, NEC

NAGW 3187 Clark University 4775
NAGW-3187/CLARK UNIV/THE USE OF SATELLITE IMAGERY IN ASSESSING ENVIRONMENTAL CRITICALITY IN THE
Period Obligations
08/21/1992-08/31/1994 FY94: \$50,402 TOTAL: \$104,020
Prin. Invest. NASA Tech. Officer CASE Category
R KASPERSON HQ/M R HELFERT 39-Env Sci, NEC
B TURNER HQ/D M BUTLER

NGT 00-030-179 Clark University 4776
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/01/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
J R EASTMAN HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NAG 5-2261 College of The Holy Cross 4777
SEARCH FOR THE IRON ABSORPTION EDGES IN THE TAILS OF X-RAY BURSTS
Period Obligations
05/04/1993-05/14/1994 FY94: \$0 TOTAL: \$12,920
Prin. Invest. NASA Tech. Officer CASE Category
R ROSS GSFC/N WHITE 11-Astronomy

NAG 1-1305 Harvard University 4778
HIGH ALTITUDE AIRCRAFT AND BALLOON-BORNE OBSERVATION IN EARTH'S STRATOSPHERE
Period Obligations
06/28/1991-12/31/1994 FY94: \$1,918,385 TOTAL: \$6,632,080
Prin. Invest. NASA Tech. Officer CASE Category
J G ANDERSON LARC/L R POOLE 31-Atmos Sci

NAG 1-1345 Harvard University 4779
MINDFULNESS AND EFFORT
Period Obligations
09/24/1991-06/30/1993 FY94: TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
E J LANGER LARC/A T POPE 69-Psych, NEC

NAG 1-1421 Harvard University 4780
PHOTOCHEMICAL AND BIOMASS BURNING INFLUENCES OVER THE SOUTH TROPICAL ATLANTIC: AN ANALYSIS OF TRACE
Period Obligations
03/20/1992-02/28/1996 FY94: \$124,000 TOTAL: \$267,351
Prin. Invest. NASA Tech. Officer CASE Category
D J JACOB LARC/J M HOELL 31-Atmos Sci
LARC/R J BENDURA

NAG 1-1609 Harvard University 4781
SOUTHERN HEMISPHERE IN SITU OBSERVATIONS OF OH, HO2, ClO, AND BRO, FROM THE ER-2 AIRCRAFT FOR THE
Period Obligations
04/11/1994-04/10/1995 FY94: \$158,424 TOTAL: \$158,424
Prin. Invest. NASA Tech. Officer CASE Category
J G ANDERSON LARC/L R POOLE 31-Atmos Sci
P S WORLD LARC/G L MADDERO

NAG 1-1617 Harvard University 4782
SOUTHERN HEMISPHERE IN SITU OBSERVATIONS OF OH, HO2, ClO, AND BRO, FROM THE ER-2 AIRCRAFT FOR THE
Period Obligations
04/11/1994-04/10/1995 FY94: \$258,152 TOTAL: \$258,152
Prin. Invest. NASA Tech. Officer CASE Category
J G ANDERSON LARC/L R POOLE 31-Atmos Sci
P S WORLD LARC/G L MADDERO

NAG 2-451 Harvard University 4783
MEASUREMENT OF BLOOD FLOWS, RPRESSURES, AND CARDIAC DIMENSIONS IN RHESUS MONKEYS
Period Obligations
04/01/1987-10/31/1993 FY94: \$0 TOTAL: \$1,180,941
Prin. Invest. NASA Tech. Officer CASE Category
S F VATNER ARC/P X CALLAHAN 51-Biological Sci
D R KNIGHT ARC/C M WINGET
T A PATRICK

NAG 2-704 Harvard University 4784
MUSCLE PROTEIN LOSS IN WEIGHTLESS ENVIRONMENTS: ROLE OF THE ATP-UBIQUITIN-DEPENDENT PROTEOLYTIC..
Period Obligations
05/16/1991-12/31/1994 FY94: \$74,000 TOTAL: \$255,923
Prin. Invest. NASA Tech. Officer CASE Category
A GOLDBERG ARC/E M HOLTON 51-Biological Sci

NAG 2-731 Harvard University 4785
HIGH SPEED RESEARCH PROGRAM
Period Obligations
08/26/1991-11/30/1994 FY94: \$55,583 TOTAL: \$486,329
Prin. Invest. NASA Tech. Officer CASE Category
S C WOFSY ARC/E P CONDON 31-Atmos Sci
ARC/O B TOON

NAG 2-843 Harvard University 4786
MICROBIAL BIOFILM FORMATION AND ITS CONSEQUENCES FOR THE CELSS PROGRAM
Period Obligations
06/10/1993-03/31/1995 FY94: \$133,000 TOTAL: \$266,000
Prin. Invest. NASA Tech. Officer CASE Category
R MITCHELL ARC/R D MACELROY 51-Biological Sci

NAG 3-1385 Harvard University 4787
THE EXTENSIONAL RHEOLOGY OF NON-NEWTONIAN MATERIALS
Period Obligations
12/22/1992-12/13/1994 FY94: \$135,000 TOTAL: \$235,000
Prin. Invest. NASA Tech. Officer CASE Category
G MCKINLEY LERC/F CHIARAMONTE 46-Mech Engr

NAG 5-1624 Harvard University 4788
SEARCH FOR NEW LOW LUMINOSITY GLOBULAR CLUSTER X-RAY SOURCES
Period Obligations
06/07/1991-12/14/1995 FY94: \$14,000 TOTAL: \$95,368
Prin. Invest. NASA Tech. Officer CASE Category
J E GRINDLAY GSFC/R PETRE 11-Astronomy

NAG 5-1690 Harvard University 4789
GAMMA RAYS FROM SUPERNOVAE
Period Obligations
10/16/1991-10/31/1993 FY94: \$0 TOTAL: \$104,552
Prin. Invest. NASA Tech. Officer CASE Category
J E GRINDLAY GSFC/J P NORRIS 11-Astronomy
GSFC/C A GEHRELS

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAG 5-1794 **Harvard University** **4790**
NET EXCHANGE OF CO₂ IN MIDLATITUDE FIRESTS
Period *Obligations*
10/30/1991-02/28/1993 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer*
S WOFSY GSFC/P SELLERS CASE Category
GSFC 31-Atmos Sci

NAG 5-1895 **Harvard University** **4791**
EXTRAGALACTIC RADIO JETS AND THE INTERGALACTIC MED IUM
Period *Obligations*
02/12/1992-02/28/1993 FY94: \$0 TOTAL: \$5,370
Prin. Invest. *NASA Tech. Officer*
M BIRKINSHAW GSFC/R PETRE CASE Category
11-Astronomy

NAG 5-1904 **Harvard University** **4792**
OBSERVATIONAL IMPLICATIONS OF MERGERS OF NEUTRON S TAR
AND BLACK HOLE BINARIES
Period *Obligations*
02/20/1992-09/30/1993 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer*
R NARAYAN GSFC/J NORRIS CASE Category
T PIRAN GSFC/N GEHRELS 11-Astronomy

NAG 5-2076 **Harvard University** **4793**
GAMMA-RAYS FROM MOLECULAR CLOUDS IN THE OUTER GALA
XY
Period *Obligations*
08/25/1992-08/31/1995 FY94: \$102,852 TOTAL: \$152,790
Prin. Invest. *NASA Tech. Officer*
P THADDEUS GSFC/J P NORRIS CASE Category
S W DIGEL GSFC/N WHITE 11-Astronomy

NAG 5-2077 **Harvard University** **4794**
MULTIDIMENSIONAL SUPERCOMPUTER SIMULATIONS OF THE
INTERSTELLAR MEDIUM: A LINK BETWEEN THE
Period *Obligations*
08/25/1992-08/31/1994 FY94: \$0 TOTAL: \$52,000
Prin. Invest. *NASA Tech. Officer*
R NARAYAN GSFC/J P NORRIS CASE Category
GSFC/N WHITE 11-Astronomy

NAG 5-2243 **Harvard University** **4795**
SEARCH FOR GAMMA-RAY EMISSION FROM MILLISECOND PUL
SARS AND COMPACT BINARIES IN THE GLOBULAR
Period *Obligations*
04/08/1993-04/14/1994 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer*
J E GRINDLAY GSFC/J P NORRIS CASE Category
GSFC/N WHITE 11-Astronomy

NAG 5-2253 **Harvard University** **4796**
EDDY CORRELATION FLUX MEASUREMENTS OF CO₂, O₃, AND NOY
FOR BOREAS
Period *Obligations*
04/30/1993-04/30/1995 FY94: \$227,935 TOTAL: \$467,935
Prin. Invest. *NASA Tech. Officer*
S C WOFSY GSFC/F G HALL CASE Category
GSFC/P SELLERS 39-Env Sci, NEC

NAG 5-2305 **Harvard University** **4797**
CONTINUING ULTRAVIOLET SPECTROSCOPY OF SN 1987A
Period *Obligations*
07/07/1993-07/14/1994 FY94: \$0 TOTAL: \$18,800
Prin. Invest. *NASA Tech. Officer*
R P KIRSHNER GSFC/D WEST CASE Category
11-Astronomy

NAG 5-2487 **Harvard University** **4798**
SUPERNOVA SPECTROSCOPY
Period *Obligations*
02/02/1994-02/14/1995 FY94: \$19,500 TOTAL: \$19,500
Prin. Invest. *NASA Tech. Officer*
R KIRSHNER GSFC/D WEST CASE Category
11-Astronomy

NAG 5-2600 **Harvard University** **4799**
PRELIMINARY 3-D MODEL STUDY OF EFFECT OF SUBSONIC
AIRCRAFT ON TROPOSPHERIC OZONE AND OH IN NORTHERN
Period *Obligations*
06/01/1994-05/31/1995 FY94: \$81,000 TOTAL: \$81,000
Prin. Invest. *NASA Tech. Officer*
D J JACOB GSFC/R W STEWART CASE Category
31-Atmos Sci

NAG 8-1034 **Harvard University** **4800**
TIMING AND SPECTRAL STUDIES OF THE LMXB1916-05
Period *Obligations*
02/07/1984-09/31/1995 FY94: \$14,848 TOTAL: \$14,848
Prin. Invest. *NASA Tech. Officer*
J E TRINDLEY MSFC/J VARGAS CASE Category
11-Astronomy

NAGW 599 **Harvard University** **4801**
PALEOSOLS AS INDICATORS OF ATMOSPHERIC EVOLUTION
Period *Obligations*
04/01/1984-09/30/1996 FY94: \$99,556 TOTAL: \$730,459
Prin. Invest. *NASA Tech. Officer*
A D HOLLAND HQ/J D RUMMEL CASE Category
HQ/M AVERNER 32-Geological Sci

NAGW 624 **Harvard University** **4802**
DEVELOPMENT OF AN ENERGETIC X-RAY IMAGING EXPERIMENT
(EXITE) AND ASSOCIATED BALLON GONDOLA
Period *Obligations*
04/01/1984-11/30/1994 FY94: \$340,891 TOTAL: \$2,956,429
Prin. Invest. *NASA Tech. Officer*
J GRINDLAY HQ/L J KALUZIENSKI CASE Category
HQ/A N BUNNER 11-Astronomy

NAGW 893 **Harvard University** **4803**
CONTINUED RESEARCH
Period *Obligations*
05/15/1986-11/30/1994 FY94: \$64,922 TOTAL: \$575,775
Prin. Invest. *NASA Tech. Officer*
A H KNOLL HQ/J D RUMMEL CASE Category
HQ/M AVERNER 32-Geological Sci

NAGW 1230 **Harvard University** **4804**
STRATOSPHERIC CHEMISTRYADRY
Period *Obligations*
02/29/1988-11/30/1994 FY94: \$195,000 TOTAL: \$1,434,203
Prin. Invest. *NASA Tech. Officer*
S C WOFSY HQ/R D MCPETERS CASE Category
HQ/M J PRATHER 31-Atmos Sci

NAGW 1596 **Harvard University** **4805**
ABSOLUTE TRANSITION PROBABILITIES OF LINES
Period *Obligations*
12/27/1988-12/14/1994 FY94: \$71,000 TOTAL: \$412,000
Prin. Invest. *NASA Tech. Officer*
W H PARKINSON HQ/G C CLAYTON CASE Category
31-Atmos Sci

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAGW 1598 Harvard University 4806
THEORETICAL RESEARCH IN PLANETARY PHYSICS
Period *Obligations*
01/23/1989-11/30/1994 FY94: \$67,841 TOTAL: \$411,633
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A G CAMERON HQ/J M BOYCE 32-Geological Sci
HQ

NAGW 2872 Harvard University 4814
WIDE-BAND WIDTH HIGH RESOLUTION SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE
Period *Obligations*
02/14/1992-12/14/1994 FY94: \$35,000 TOTAL: \$235,930
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P HOROWITZ HQ/J D RUMMEL 11-Astronomy

NAGW 1687 Harvard University 4807
LABORATORY STUDIES IN ULTRAVIOLET SOLAR PHYSICS
Period *Obligations*
03/13/1989-09/30/1994 FY94: \$93,000 TOTAL: \$659,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W H PARKINSON HQ/J D BOHLIN 13-Physics
HQ/S KANE

NAGW 3000 Harvard University 4815
STUDIES OF MANTLE FLOW, CONVECTION AND GEOPHYSICAL OBSERVABLES
Period *Obligations*
03/13/1992-12/31/1994 FY94: \$64,400 TOTAL: \$186,884
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J O'CONNELL HQ/R E MURPHY 32-Geological Sci
HQ/D M BUTLER

NAGW 2277 Harvard University 4808
INVESTIGATIONS OF STAR FORMATION PROCESSES
Period *Obligations*
01/09/1991-01/31/1995 FY94: \$55,000 TOTAL: \$220,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A G CAMERON HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3082 Harvard University 4816
DIRECT MEASUREMENTS OF ECOSYSTEM FLUXES OF CO₂ AND NOY
Period *Obligations*
05/15/1992-12/31/1994 FY94: \$280,429 TOTAL: \$810,429
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S C WOFSY HQ/A C JANETOS 39-Env Sci, NEC
HQ/D E WICKLAND

NAGW 2494 Harvard University 4809
NAGW-2494/HARVARD UNIV/NEPTUNIAN MAGNETIC FIELD ANALYSIS
Period *Obligations*
06/03/1991-02/28/1993 FY94: \$0 TOTAL: \$82,016
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BLOXHAM HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 3280 Harvard University 4817
NAGW-3280/HARVARD UNIV/COMPACT OBJECTS AND BINARIES IN GLOBULAR CLUSTERS AND THE GALAXY
Period *Obligations*
11/27/1992-10/31/1994 FY94: \$63,160 TOTAL: \$121,669
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J GRINDLAY HQ/G R RIEGLER 11-Astronomy

NAGW 2570 Harvard University 4810
ABSOLUTE RADIOMETRIC CALIBRATION OF SOLAR EXTREME ULTRAVIOLET SPECTROMETERS
Period *Obligations*
07/01/1991-05/31/1994 FY94: TOTAL: \$294,931
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W H PARKINSON HQ/W J WAGNER 13-Physics
HQ/K LANG

NAGW 3467 Harvard University 4818
GEOMAGNETIC FIELD MODELS INCORPORATION PHYSICAL CONSTRAINTS ON THE SECULAR VARIATIONS
Period *Obligations*
04/09/1993-02/28/1996 FY94: \$67,000 TOTAL: \$132,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BLOXHAM HQ/B F CHAO 32-Geological Sci
HQ/R E MURPHY

NAGW 2632 Harvard University 4811
THREE-DIMENSIONAL MODELING OF TROPOSPHERIC TRACE GASES
Period *Obligations*
08/22/1991-02/14/1993 FY94: \$203,700 TOTAL: \$785,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M B MCELROY HQ/J A KAYE 31-Atmos Sci
S C WOFSY HQ/R E MURPHY

NAGW 3509 Harvard University 4819
NAGW-3509/HARVARD UNIVERSITY/UNDERCOOLED MELTS: PROPERTIES, SOLIDIFICATION AND METASTABLE PHASES
Period *Obligations*
04/06/1993-03/31/1994 FY94: \$0 TOTAL: \$12,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F SPAEPEN HQ/M C LEE 13-Physics

NAGW 2838 Harvard University 4812
CRYSTAL NUCLEATION, HYDROSTATIC TENSION AND DIFFUSION IN METAL AND SEMICONDUCTOR MELTS
Period *Obligations*
01/31/1992-03/31/1995 FY94: \$105,000 TOTAL: \$315,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F A SPAEPEN HQ/B M CARPENTER 13-Physics
D TURNBULL
M J AZIZ

NAGW 3659 Harvard University 4820
INTERPRETING STROMATOLITES
Period *Obligations*
06/15/1993-06/30/1994 FY94: \$0 TOTAL: \$15,255
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A H KNOLL HQ/J D RUMMEL 32-Geological Sci

NAGW 2858 Harvard University 4813
ISOTOPIC STUDIES OF THE ORIGIN OF THE SOLAR SYSTEM
Period *Obligations*
01/31/1992-10/31/1994 FY94: \$50,000 TOTAL: \$244,959
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S B JACOBSEN HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3996 Harvard University 4821
CRYSTAL-LIQUID DENSITY INVERSIONS IN TERRESTRIAL AND LUNAR BASALTS
Period *Obligations*
05/14/1994-03/31/1996 FY94: \$65,000 TOTAL: \$65,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C AGEE HQ/J BOYCE 32-Geological Sci

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAS 1-18946 Harvard University 4822
SAGE III SCIENCE SUPPORT; P.I. - WOFSY
Period Obligations
11/28/1989-01/31/1995 FY94: \$40,000 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
S C WOFSY LARC/G MADDREA 19-Phys Sci, NEC

NGT 00-030-027 Harvard University 4830
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/31/1990-09/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
T M DELSOLE HQ/G ASRAR 31-Atmos Sci

NAS 1-19955 Harvard University 4823
SAGE II SCIENTIFIC INVESTIGATIONS
Period Obligations
05/03/1993-05/31/1996 FY94: \$45,000 TOTAL: \$95,000
Prin. Invest. NASA Tech. Officer CASE Category
S C WOFSY LARC/G L MADDREA 31-Atmos Sci
LARC/M P MCCORMICK

NGT 00-030-031 Harvard University 4831
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/31/1990-11/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
S A LLOYD HQ/G ASRAR 31-Atmos Sci

NAS 5-32587 Harvard University 4824
NRA-SPECTROSCOPIC DATA FOR AN ASTRONOMY DATABASE PI:
PARKINSON
Period Obligations
04/06/1994-05/05/1995 FY94: \$53,000 TOTAL: \$53,000
Prin. Invest. NASA Tech. Officer CASE Category
W H PARKINSON GSFC/D WEST 11-Astronomy

NGT 00-030-044 Harvard University 4832
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1991-08/31/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
S L BASSOW HQ/D M BUTLER 39-Env Sci, NEC
F A BAZZAZ HQ/G S WILSON

NCC 2-693 Harvard University 4825
DEVELOPMENT OF TECHNIQUES FOR THE IN SITU OBSERVATION
OF OH AND HO2 FOR STUDIES OF THE IMPACT
Period Obligations
10/09/1990-09/30/1993 FY94: \$0 TOTAL: \$1,097,456
Prin. Invest. NASA Tech. Officer CASE Category
J G ANDERSON ARC/E P CONDON 31-Atmos Sci

NGT 00-030-071 Harvard University 4833
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1991-08/31/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
T TOOLAN HQ/D M BUTLER 33-Oceanography
J MCCARTHY HQ/G S WILSON

NCC 2-694 Harvard University 4826
DEVELOPMENT OF A HIGH-SENSITIVITY, FAST RESPONSE
INSTRUMENT FOR IN SITU DETERMINATION OF CO2
Period Obligations
09/27/1990-09/30/1994 FY94: \$219,612 TOTAL: \$809,648
Prin. Invest. NASA Tech. Officer CASE Category
S C WOFSY ARC/E P CONDON 31-Atmos Sci
D W TOOHEY

NGT 00-030-080 Harvard University 4834
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1991-08/31/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
L M AVALLONE HQ/D M BUTLER 31-Atmos Sci
J G ANDERSON HQ/G S WILSON

NCC 2-786 Harvard University 4827
HIGH ALTITUDE NO AND NOY MEASUREMENTS USING A NEW LI
GHTWEIGHT CHEMILUMINESCENCE INSTRUMENT
Period Obligations
04/02/1993-09/30/1994 FY94: \$283,396 TOTAL: \$461,723
Prin. Invest. NASA Tech. Officer CASE Category
S C WOFSY ARC/E CONDON 31-Atmos Sci

NGT 00-030-082 Harvard University 4835
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/09/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A E DESSLER HQ/D M BUTLER 31-Atmos Sci
J G ANDERSON HQ/G S WILSON

NCC 2-790 Harvard University 4828
HIGH-ALTITUDE, TROPICAL LATITUDE C10,BRO,O3,P AND T
OBSERVATIONS FROM THE PERSEUS FOR THE 1994 ASHOM..
Period Obligations
04/02/1993-12/31/1994 FY94: \$313,456 TOTAL: \$779,556
Prin. Invest. NASA Tech. Officer CASE Category
J G ANDERSON ARC/E CONDON 31-Atmos Sci
ARC/C DULLEN

NGT 00-030-172 Harvard University 4836
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/23/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D JACOB HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NCC 2-875 Harvard University 4829
MEASUREMENT OF BLOOD FLOWS, PRESSURES, AND CARDIAC DI
MENSIONS
Period Obligations
09/27/1994-05/31/1995 FY94: \$97,000 TOTAL: \$97,000
Prin. Invest. NASA Tech. Officer CASE Category
S F VATNER ARC/A R HARGENS 56-Medical Sciences

NGT 00-030-182 Harvard University 4837
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/02/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
M S MCELROY HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NGT 00-030-184 Harvard University 4838
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/02/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
D JACOB HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-030-195 Harvard University 4839
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/01/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
F A BAZZAZ HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-050-615 Harvard University 4840
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/02/1990-06/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J BLOXHAM HQ/F C OWENS 33-Oceanography

NGT 00-050-663 Harvard University 4841
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/13/1990-11/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
I I SHAPIRO HQ/F C OWENS 11-Astronomy

NGT 00-050-699 Harvard University 4842
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-12/31/1994 FY94: \$5,000 TOTAL: \$71,000
Prin. Invest. NASA Tech. Officer CASE Category
I I SHAPIRO HQ/F C OWENS 13-Physics

NGT 00-050-802 Harvard University 4843
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/25/1991-06/20/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R KIRSHNER HQ/F C OWENS 11-Astronomy

NGT 00-050-814 Harvard University 4844
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
M J GELLER HQ/J ALEXANDER 11-Astronomy

NGT 00-050-819 Harvard University 4845
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/10/1990-09/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J P HOCHRA HQ/F C OWENS 11-Astronomy

NGT 00-050-851 Harvard University 4846
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
F K THIELEMANN HQ/F C OWENS 11-Astronomy

NGT 00-050-874 Harvard University 4847
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/15/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
D INGBER JSC/S GOLDSTEIN 56-Medical Sciences

NGT 00-050-942 Harvard University 4848
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A R BARRON LERC/F MONTEGANI 12-Chemistry

NGT 00-050-994 Harvard University 4849
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/11/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R P KIRSHNER HQ/J K ALEXANDER 11-Astronomy

NGT 00-050-999 Harvard University 4850
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/28/1992-08/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J E GRINDLAY HQ/J K ALEXANDER 13-Physics

NGT 00-051-002 Harvard University 4851
NGT-51002/HARVARD UNIV/GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/14/1992-08/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R P KIRSHNER HQ/J K ALEXANDER 11-Astronomy

NGT 00-051-081 Harvard University 4852
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/09/1991-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R KIRSHNER HQ/J LYNCH 11-Astronomy

NGT 00-051-093 Harvard University 4853
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/27/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R P KIRSHNER HQ/D HOLLAND 13-Physics

NGT 00-051-312 Harvard University 4854
GRADUATE STUDENT RESEARCHER PROGRAM
Period Obligations
08/22/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R KIRSHNER ARC/M MOORE 11-Astronomy

NGT 00-051-336 Harvard University 4855
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
M J GELLER HQ/D HOLLAND 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NGT 00-090-172 Harvard University 4856
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
L BUELL HQ/D K RUSSELL 51-Biological Sci

NAG 1-126 Massachusetts Institute of Technology 4857
RELIABILITY ISSUES IN ACTIVE CONTROL OF LARGE FLEXIBLE SPACE STRUCTURES
Period Obligations
11/14/1980-12/31/1993 FY94: \$0 TOTAL: \$985,049
Prin. Invest. NASA Tech. Officer CASE Category
W E VANDERVELDE LARC/R C MONTGOMERY 41-Aero Engr
B WALKER LARC/S S WELCH

NAG 1-801 Massachusetts Institute of Technology 4858
THE DYNAMIC CONTROL OF ROBOTIC MANIPULATORS IN SPACE
Period Obligations
08/17/1987-01/31/1995 FY94: \$0 TOTAL: \$1,649,308
Prin. Invest. NASA Tech. Officer CASE Category
S DUBOWSKY LARC/J KOLAROV 49-Engr, NEC
LARC/J E PENNINGTON

NAG 1-924 Massachusetts Institute of Technology 4859
SOLID STATE LASER MATERIALS
Period Obligations
11/15/1988-04/30/1993 FY94: TOTAL: \$222,187
Prin. Invest. NASA Tech. Officer CASE Category
H P JENSSEN LARC/R V HESS 13-Physics
LARC/P BROCKMAN

NAG 1-991 Massachusetts Institute of Technology 4860
COMPOSITE FUSELAGE TECHNOLOGY
Period Obligations
04/10/1989-04/06/1995 FY94: \$87,979 TOTAL: \$630,133
Prin. Invest. NASA Tech. Officer CASE Category
P A LAGACE LARC/J H STARNES 41-Aero Engr
M J GRAVES LARC/M J SHUART

NAG 1-1088 Massachusetts Institute of Technology 4861
DESIGN OF HIGH PERFORMANCE MULTIVARIABLE CONTROL SYSTEMS FOR SUPERMANEUVERABLE AIRCRAFT AT HIGH
Period Obligations
01/18/1990-01/16/1993 FY94: TOTAL: \$115,046
Prin. Invest. NASA Tech. Officer CASE Category
L VALAVANI LARC/B J BACON 41-Aero Engr

NAG 1-1252 Massachusetts Institute of Technology 4862
METEOROLOGICAL ANALYSIS OF PACIFIC EXPLORATORY MISSION-WEST (PEM-WEST)
Period Obligations
04/15/1991-07/14/1995 FY94: \$57,500 TOTAL: \$765,873
Prin. Invest. NASA Tech. Officer CASE Category
R E NEWELL LARC/J M HOELL 31-Atmos Sci
LARC/M C SHIPHAM

NAG 1-1299 Massachusetts Institute of Technology 4863
CONTROL OF HELICOPTER ROTOR AERODYNAMICS WITH BLADE-MOUNTED PIEZOELECTRIC ACTUATORS
Period Obligations
07/12/1991-10/31/1993 FY94: TOTAL: \$131,601
Prin. Invest. NASA Tech. Officer CASE Category
S R HALL LARC/J D BERRY 41-Aero Engr
LARC/J C WILSON

NAG 1-1360 Massachusetts Institute of Technology 4864
AIR PARCEL TRAJECTORIES - LOWER STRATOSPHERE USING WINDS FROM THE 'SKIHI' GENERAL CIRCULATION MODEL
Period Obligations
12/17/1991-10/10/1994 FY94: \$116,060 TOTAL: \$226,688
Prin. Invest. NASA Tech. Officer CASE Category
R A PLUMB LARC/R E TURNER 31-Atmos Sci
J D MAHLMAN LARC/W T BLACKSHEAR

NAG 1-1463 Massachusetts Institute of Technology 4865
PREDICTION OF THERMAL CYCLING INDUCED CRACKING IN POLYMER MATRIX COMPOSITES - MY 1/3
Period Obligations
01/29/1993-01/31/1995 FY94: \$60,558 TOTAL: \$101,058
Prin. Invest. NASA Tech. Officer CASE Category
H L MCMANUS LARC/D E BOWLES 47-Materials Engr
LARC/S S THOMPkins

NAG 1-1511 Massachusetts Institute of Technology 4866
COMPRESSIBLE MIXING AND NOISE GENERATION DOWNSTREAM OF LOBED MIXERS
Period Obligations
06/25/1993-06/27/1994 FY94: \$80,907 TOTAL: \$215,032
Prin. Invest. NASA Tech. Officer CASE Category
I A WAITZ LARC/J M SEINER 41-Aero Engr
F M GREITZER LARC/M K PONTON
C S TAN

NAG 1-1512 Massachusetts Institute of Technology 4867
SUCTION AND BLOWING STRATEGIES FOR REDUCTION OF FAN NOISE
Period Obligations
06/25/1993-09/30/1994 FY94: \$161,084 TOTAL: \$214,626
Prin. Invest. NASA Tech. Officer CASE Category
I A WAITZ LARC/C H GERHOLD 41-Aero Engr
K U INGARD
A H EPSTEIN

NAG 1-1519 Massachusetts Institute of Technology 4868
NONLINEAR GEOMETRICAL ACOUSTICS NLPN 93-503
Period Obligations
07/12/1993-07/31/1995 FY94: \$97,000 TOTAL: \$141,761
Prin. Invest. NASA Tech. Officer CASE Category
R R ROSALES LARC/K R MEADOWS 41-Aero Engr

NAG 1-1525 Massachusetts Institute of Technology 4869
PROBLEMS IN SUPERSONIC BOUNDARY LAYER STABILITY
Period Obligations
06/30/1993-01/31/1995 FY94: \$9,770 TOTAL: \$19,439
Prin. Invest. NASA Tech. Officer CASE Category
K S BREYER LARC/S K ROBINSON 41-Aero Engr

NAG 1-1531 Massachusetts Institute of Technology 4870
ANALYSIS OF NOISE MINIMAL APPROACH AND DEPARTURE PROCEDURES USING ADVANCED FLIGHT GUIDANCE TECHNIQUE
Period Obligations
08/30/1993-08/31/1995 FY94: \$26,000 TOTAL: \$125,681
Prin. Invest. NASA Tech. Officer CASE Category
R J HANSMAN JR. LARC/C A POWELL 41-Aero Engr
LARC/K P SHEPHERD

NASA'S UNIVERSITY PROGRAM MASSACHUSETTS (Continued)

NAG 1-1577 Massachusetts Institute of Technology 4871
FUTURE POTENTIAL FOR A LARGE ALL-CARGO AIRCRAFT SYSTEM (LACAS)

Period	Obligations	
01/26/1994-01/31/1995	FY94: \$85,000	TOTAL: \$85,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R W SIMPSON	LARC/S J MORRIS	41-Aero Engr

NAG 1-1587 Massachusetts Institute of Technology 4872
FINITE ELEMENT METHODS FOR THE SIMULATION OF HYPERSONIC FLOWS

Period	Obligations	
01/31/1994-01/31/1995	FY94: \$61,591	TOTAL: \$61,591
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J PERAIRE	LARC/K S BEY	41-Aero Engr
	LARC/A R WIETING	

NAG 1-1602 Massachusetts Institute of Technology 4873
MIT ENGINEERING/RESEARCH INTERNSHIP PROGRAM

Period	Obligations	
02/01/1994-01/31/1995	FY94: \$40,470	TOTAL: \$40,470
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
I A WAITZ	LARC/D S MILLAR	49-Engr, NEC

NAG 1-1613 Massachusetts Institute of Technology 4874
SURROGATES FOR NUMERICAL SIMULATIONS; AN OPTIMIZATION FRAMEWORK

Period	Obligations	
05/06/1994-05/31/1995	FY94: \$79,608	TOTAL: \$79,608
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A T PATERA	LARC/T W ROBERTS	46-Mech Engr

NAG 1-1637 Massachusetts Institute of Technology 4875
DESIGN, PLANNING AND CONTROL OF ROBOTIC SYSTEMS IN SPACE

Period	Obligations	
07/22/1994-07/21/1995	FY94: \$35,000	TOTAL: \$35,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S DUBROWSKY	LARC/H A ALDRIDGE	46-Mech Engr
	LARC/L K BARKER	

NAG 2-445 Massachusetts Institute of Technology 4876
RESEARCH ON VISUAL VESTIBULAR INTERACTION

Period	Obligations	
01/01/1987-09/30/1993	FY94: \$0	TOTAL: \$634,914
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L R YOUNG	ARC/M M COHEN	51-Biological Sci
C OMAN	ARC/M L CORCORAN	

NAG 2-632 Massachusetts Institute of Technology 4877
LABORATORY STUDIES OF STRATOSPHERIC AEROSOL CHEMISTRY

Period	Obligations	
05/02/1994-12/31/1994	FY94: \$130,000	TOTAL: \$777,240
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M J MOLINA	ARC/E CONDON	31-Atmos Sci
	ARC/B TOON	

NAG 2-693 Massachusetts Institute of Technology 4878
DEVELOPMENT OF A11-NB SIS DIRECTOR DETECTORS

Period	Obligations	
02/28/1991-02/28/1995	FY94: \$50,000	TOTAL: \$224,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
Q HU	ARC/C R MCCREIGHT	13-Physics
	ARC/R E MCMURRAY	

NAG 2-716 Massachusetts Institute of Technology 4879
SITUATIONAL AWARENESS ISSUES IN THE IMPLEMENTATION OF DATALINK

Period	Obligations	
06/26/1991-12/31/1994	FY94: \$340,481	TOTAL: \$543,506
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J HANSMAN	ARC/K CORKER	49-Engr, NEC

NAG 2-729 Massachusetts Institute of Technology 4880
MODELING INFORMATION PROCESSING IN FLIGHT MANAGEMENT

Period	Obligations	
08/27/1991-01/31/1995	FY94: \$144,987	TOTAL: \$374,987
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T B SHERIDAN	ARC/K M CORKER	69-Psych, NEC
	ARC/E J HARTZELL	

NAG 2-754 Massachusetts Institute of Technology 4881
DOES PLUTO HAVE A HAZE LAYER?

Period	Obligations	
02/12/1992-12/31/1992	FY94: \$0	TOTAL: \$41,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L ELLIOT	ARC/C D LAUGHLIN	11-Astronomy
	ARC/C M GILLESPIE	

NAG 2-853 Massachusetts Institute of Technology 4882
CONFLUENT WAKE/BOUNDARY-LAYER METHOD FOR HIGH-LIFT AIRFOIL FLOW PREDICTION

Period	Obligations	
06/30/1993-05/31/1995	FY94: \$50,000	TOTAL: \$80,769
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M DRELA	ARC/L L ERIKSON	41-Aero Engr

NAG 2-855 Massachusetts Institute of Technology 4883
ARCHIVING OF PLANETARY RING DATA

Period	Obligations	
07/16/1993-06/30/1995	FY94: \$35,360	TOTAL: \$47,360
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L ELLIOT	ARC/J N CUZZI	11-Astronomy

NAG 2-884 Massachusetts Institute of Technology 4884
VISUALIZATION OF UNSTEADY COMPUTATIONAL FLUID DYNAMICS

Period	Obligations	
02/23/1994-12/31/1994	FY94: \$85,529	TOTAL: \$85,529
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R HAIMES	ARC/T S WOODROW	49-Engr, NEC

NAG 2-4002 Massachusetts Institute of Technology 4885
UNSTRUCTURED GRID METHODS FOR THE SIMULATION OF 3D TRANSIENT INVISCID FLOWS

Period	Obligations	
01/05/1994-11/15/1994	FY94: \$65,178	TOTAL: \$65,178
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J PERAIRE	ARC/K GUPTA	41-Aero Engr

NAG 2-4008 Massachusetts Institute of Technology 4886
MIT DEVELOPMENT AND TESTING OF AIRFOILS FOR HIGH ALTITUDE AIRCRAFT

Period	Obligations	
09/28/1994-08/31/1995	FY94: \$76,407	TOTAL: \$76,407
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M DRELA	GSFC/R J JEENEN	41-Aero Engr
T WASHINGTON	GSFC/J BAUER	

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAG 3-660 Massachusetts Institute of Technology 4887
DIRECT SIMULATION OF 3-D FLUID MECHANICAL PHENOMENA IN
INTERNAL FLOWS
Period *Obligations*
11/08/1985-09/30/1994 FY94: TOTAL: \$421,598
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E E COVERT LERC/J J ADAMCZYK 41-Aero Engr
C S TAN

NAG 3-666 Massachusetts Institute of Technology 4888
QUANTITATIVE STUDIES OF ICE ACCRETION UTILIZING ULTRASONIC
MEASUREMENT TECHNIQUES
Period *Obligations*
11/08/1985-01/28/1995 FY94: \$57,158 TOTAL: \$399,827
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J HANSMAN LERC/M G POTAPCZUK 41-Aero Engr

NAG 3-695 Massachusetts Institute of Technology 4889
INVESTIGATION OF INTERACTION BETWEEN AC POWER LINES AND
SPACE PLASMAS
Period *Obligations*
02/06/1986-03/27/1995 FY94: \$56,927 TOTAL: \$476,224
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E HASTINGS LERC/D B SNYDER 19-Phys Sci, NEC
S OLBERT

NAG 3-772 Massachusetts Institute of Technology 4890
3-D FLOW IN RADIAL TURBOMACHINERY AND ITS IMPACT ON
DESIGN
Period *Obligations*
12/29/1986-10/31/1992 FY94: TOTAL: \$432,901
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G S TAN LERC/P L MEITNER 41-Aero Engr
W HAWTHORNE LERC/K C CIVINSKES

NAG 3-844 Massachusetts Institute of Technology 4891
UNSTEADY FLOW TURBOMACHINES
Period *Obligations*
12/04/1987-06/30/1995 FY94: TOTAL: \$48,340
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E M GREITZER LERC/J J ADAMCZYK 41-Aero Engr

NAG 3-927 Massachusetts Institute of Technology 4892
ADV ICE DETECTION TECH FOR HELICOPTER AND AIRCRAFT
APPL
Period *Obligations*
09/08/1988-12/31/1992 FY94: TOTAL: \$98,914
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J HANSMAN LERC/J J REINMANN 41-Aero Engr

NAG 3-953 Massachusetts Institute of Technology 4893
INLET DISTORTION IN ENGINES ON VSTOL AIRCRAFT
Period *Obligations*
12/20/1988-12/31/1993 FY94: TOTAL: \$401,494
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S TAN LERC/C DRUMMOND 41-Aero Engr
E M GREITZER LERC/F A NEWMAN

NAG 3-1013 Massachusetts Institute of Technology 4894
STATE VARIABLE MEASUREMENT IN HIGH SPEED TURBOMACH
INERY
Period *Obligations*
02/28/1989-12/24/1994 FY94: \$64,000 TOTAL: \$833,281
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A H EPSTEIN LERC/A J STRAZISAR 41-Aero Engr

NAG 3-1105 Massachusetts Institute of Technology 4895
COMPOSITES INTERPHASE CHARACTERIZATION BY ACOUSTO-
ULTRASONIC NDE TECHNIQUES
Period *Obligations*
01/08/1990-12/31/1993 FY94: \$0 TOTAL: \$107,415
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J H WILLIAMS LERC/H E KAUTZ 47-Materials Engr
LERC/A VARY

NAG 3-1176 Massachusetts Institute of Technology 4896
UNSTEADY THREE-DIMENSIONAL FLOW IN MARINE PROPULSO RS
Period *Obligations*
05/01/1990-06/30/1994 FY94: \$0 TOTAL: \$100,016
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S TAN LERC/J J ADAMCZYK 41-Aero Engr

NAG 3-1214 Massachusetts Institute of Technology 4897
INFLUENCE OF INLET TEMPERATURE DISTORTION ON TURBI NE
HEAT TRANSFER AND AERODYNAMICS
Period *Obligations*
11/02/1990-10/28/1994 FY94: \$93,281 TOTAL: \$344,266
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A H EPSTEIN LERC/J D HEIDMANN 41-Aero Engr
G R GUENETTE

NAG 3-1237 Massachusetts Institute of Technology 4898
VORT STRUCT IN COMPRESSOR ENDWALL FLOWFIELDS: BASI C
FLUID MECH AND IMPACT ON PERFORMANCE AND STABILITY
Period *Obligations*
03/14/1991-10/31/1994 FY94: \$120,987 TOTAL: \$350,119
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E M GREITZER LERC/G J SKOCH 41-Aero Engr

NAG 3-1344 Massachusetts Institute of Technology 4899
FLOW STABILITY IN PEBBLE-BED REACTORS
Period *Obligations*
04/16/1992-04/14/1993 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L KERREBROCK LERC/J T WALTON 49-Engr, NEC
LERC/J S CLARK

NAG 3-1364 Massachusetts Institute of Technology 4900
LOBED MIXER OPTIMIZATION FOR ADVANCED EJECTOR GEOM
ETRIES
Period *Obligations*
08/17/1992-02/15/1995 FY94: \$135,150 TOTAL: \$306,724
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I A WAITZ LERC/C K DRUMMOND 41-Aero Engr
E M GREITZER LERC/J R DEBONIS
C S TAN

NAG 3-1407 Massachusetts Institute of Technology 4901
OPTIMIZATION OF REGENERATOR-MATRIX PERFORMANCE AND D
ESIGN
Period *Obligations*
05/20/1993-12/31/1993 FY94: \$0 TOTAL: \$30,675
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D G WILSON LERC/P T KERWIN 46-Mech Engr
D S BECK

NAG 3-1443 Massachusetts Institute of Technology 4902
ICING PREDICTION ON MULTI-ELEMENT AIRFOILS
Period *Obligations*
02/10/1993-01/16/1995 FY94: \$36,756 TOTAL: \$91,756
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M DRELA LERC/M G POTAPCZUK 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAG 3-1448 Massachusetts Institute of Technology 4903
MODELLING OF THE T-55 COMPRESSOR STABILITY
Period *Obligations*
02/10/1993-06/30/1994 FY94: \$0 TOTAL: \$45,560
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A H EPSTEIN LERC/C K DRUMMOND 41-Aero Engr
G J HENDRICKS

NAG 3-1457 Massachusetts Institute of Technology 4904
IDENTIFICATION AND CONTROL OF ROTATING STALL MODES IN
THE ADVANCED DUCTED PROPULSOR
Period *Obligations*
02/23/1993-01/31/1995 FY94: \$165,317 TOTAL: \$339,053
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D PADUANO LERC/M M BRIGHT 46-Mech Engr

NAG 3-1510 Massachusetts Institute of Technology 4905
MODELING AND ANALYSIS OF POWER SYSTEMS FOR SPACE APP
LICATIONS
Period *Obligations*
07/19/1993-01/06/1995 FY94: \$0 TOTAL: \$40,283
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S D UMANS LERC/M D KANKAM 45-Elec Engr

NAG 3-1513 Massachusetts Institute of Technology 4906
EFFECTS OF FLOW UNSTEADINESS ON MULTISTAGE COMPRES
SOR PERFORMANCE
Period *Obligations*
08/06/1993-07/18/1995 FY94: \$32,477 TOTAL: \$72,052
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E M GREITZER LERC/A J STRAZISAR 41-Aero Engr
F E MARBLE
N A CUMPSTY

NAG 3-1567 Massachusetts Institute of Technology 4907
THREE-DIMENSIONAL AERODYNAMIC INSTABILITIES IN MUL
TISTAGE COMPRESSORS
Period *Obligations*
01/26/1994-01/25/1995 FY94: \$111,402 TOTAL: \$111,402
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S TAN LERC/C K DRUMMOND 41-Aero Engr
E M GREITZER LERC/F A NEWMAN

NAG 3-1591 Massachusetts Institute of Technology 4908
UTILITY OF THE FLOW SUBSTITUTION PRINCIPLE FOR HIGH SPEED
PROPULSION APPLICATIONS
Period *Obligations*
06/01/1994-03/31/1995 FY94: \$34,992 TOTAL: \$34,992
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C S TAN LERC/M MIZUKAMI 41-Aero Engr
E M GREITZER LERC/C K DRUMMOND

NAG 3-1640 Massachusetts Institute of Technology 4909
CHEMICAL INHIBITOR EFFECTS ON DIFFUSION FLAMES IN
MICROGRAVITY
Period *Obligations*
06/30/1994-06/29/1995 FY94: \$78,642 TOTAL: \$78,642
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S HOCHGREB LERC/H ROSS 46-Mech Engr
G T LINTERIS

NAG 3-1664 Massachusetts Institute of Technology 4910
CHEMICAL PROCESSES IN THE TURBINE AND EXHAUST NOZZ LE
Period *Obligations*
09/19/1994-02/18/1995 FY94: \$3,236 TOTAL: \$3,236
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I A WALTZ LERC/L S N 46-Mech Engr
R C MIAKE-LYE LERC/H L NGUYEN

NAG 5-10 Massachusetts Institute of Technology 4911
IMPROVED MICROWAVE RETRIEVAL TECHNIQUES FOR
ATMOSPHERIC TEMPERATURES, WIND, AND HUMIDITY
Period *Obligations*
02/01/1980-03/14/1994 FY94: \$5,000 TOTAL: \$1,991,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H STAELIN GSFC/J C SHIUE 31-Atmos Sci
P W ROSENANZ GSFC/J R WANG

NAG 5-584 Massachusetts Institute of Technology 4912
ANALYSIS OF THE SOLAR WIND EXPERIMENT - IMP-8
Period *Obligations*
10/01/1985-09/30/1995 FY94: \$125,000 TOTAL: \$894,499
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A J LAZARUS GSFC/G BULLOCK 11-Astronomy

NAG 5-743 Massachusetts Institute of Technology 4913
EXTENSIONS AND TESTING THE HYDROLOGICAL
PARAMETARGATION OF THE ATMOSPHERIC GENRAL CIRCULATION
MODEL
Period *Obligations*
03/01/1986-08/31/1993 FY94: \$0 TOTAL: \$484,453
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P S EAGLESON GSFC/A D GENIO 31-Atmos Sci

NAG 5-1055 Massachusetts Institute of Technology 4914
GENERATION OF ARTIFICIAL PLASMA LAYERS BY 2 MICROWAVE
BEAMS VIA AIR BREAKDOWN
Period *Obligations*
06/15/1988-09/14/1993 FY94: \$0 TOTAL: \$291,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M C LEE GSFC/R F BENSON 13-Physics

NAG 5-1314 Massachusetts Institute of Technology 4915
SCIENCE ANALYSIS FROM COBE DATA
Period *Obligations*
12/07/1989-12/31/1994 FY94: \$95,000 TOTAL: \$1,226,979
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R WEISS GSFC/J MATHER 11-Astronomy

NAG 5-1328 Massachusetts Institute of Technology 4916
INTERANNUAL VARABILITY OF THE GLOBAL CARBON AND
ENERGY
Period *Obligations*
02/05/1990-01/14/1995 FY94: \$54,910 TOTAL: \$249,910
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P H STONE GSFC/D RIND 31-Atmos Sci

NAG 5-1498 Massachusetts Institute of Technology 4917
RESEARCH RELATIVE TO ROSAT GALACTIC PLANE SURVEY
Period *Obligations*
04/02/1991-04/14/1994 FY94: TOTAL: \$11,192
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H BRADT GSFC/R PETRE 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAG 5-1615 Massachusetts Institute of Technology 4918
MODEL OF THE TROPICAL ATMOSPHERE FOR ALGORITHM DEVELOPMENT AND TESTING

Period	FY94:	Obligations	TOTAL:
05/24/1991-12/14/1993	\$0		\$343,000
Prin. Invest.	NASA Tech. Officer	CASE Category	
R L BRAS	GSFC/D SHORT	31-Atmos Sci	

NAG 5-1625 Massachusetts Institute of Technology 4919
ROSAT STUDY OF THE ECLIPSES AND ORATION OF THE UNIQUE AMHERST OBJECT HO538+608

Period	FY94:	Obligations	TOTAL:
06/07/1991-06/14/1994	\$0		\$22,384
Prin. Invest.	NASA Tech. Officer	CASE Category	
A M LEVINE	GSFC/R PETRE	11-Astronomy	

NAG 5-1656 Massachusetts Institute of Technology 4920
INVESTIGATION OF THE X-RAY ECLIPSE PHENOMENA OF LM C X-4 AND DEEP SURVEY OF THE SURROUNDING FIELD

Period	FY94:	Obligations	TOTAL:
06/24/1991-06/30/1995	\$30,000		\$127,999
Prin. Invest.	NASA Tech. Officer	CASE Category	
G W CLARK	GSFC/R PETRE	11-Astronomy	
C R CANIZARES			

NAG 5-1682 Massachusetts Institute of Technology 4921
SEARCH FOR A QUIESCENT X-RAY COUNTERPART TO THE GAMMA-RAY BURST SOURCE; SEARCH FOR QUIESCENT X-RAY.

Period	FY94:	Obligations	TOTAL:
07/15/1991-07/14/1995	\$0		\$33,000
Prin. Invest.	NASA Tech. Officer	CASE Category	
G R RICKER	GSFC/R PETRE	11-Astronomy	

NAG 5-1686 Massachusetts Institute of Technology 4922
MANTLE DYNAMICS AND GEODESY

Period	FY94:	Obligations	TOTAL:
07/15/1991-07/14/1993			\$110,674
Prin. Invest.	NASA Tech. Officer	CASE Category	
R HAGER	GSFC/J E WELKER	32-Geological Sci	

NAG 5-1784 Massachusetts Institute of Technology 4923
IDENTIFICATIONS OF X-RAY SOURCES FROM THE ROSAT GALACTIC PLAN SURVEY

Period	FY94:	Obligations	TOTAL:
10/15/1991-01/14/1995	\$37,405		\$75,405
Prin. Invest.	NASA Tech. Officer	CASE Category	
R A REMILLARD	GSFC/R PETRE	11-Astronomy	

NAG 5-1826 Massachusetts Institute of Technology 4924
CONTEMPORANEOUS ROSAT/GINGA OBSERVATIONS OF X-RAY DIP SOURCES

Period	FY94:	Obligations	TOTAL:
11/13/1991-05/14/1996	\$35,000		\$99,000
Prin. Invest.	NASA Tech. Officer	CASE Category	
W H LEWIN	GSFC/R PETRE	11-Astronomy	

NAG 5-1865 Massachusetts Institute of Technology 4925
X-RAY IMAGING OF C1 1358+62, A DISTANT, X-RAY SELECTED CLUSTER OF GALAXIES

Period	FY94:	Obligations	TOTAL:
01/22/1992-02/14/1995	\$0		\$34,905
Prin. Invest.	NASA Tech. Officer	CASE Category	
C R CANIZARES	GSFC/R PETRE	11-Astronomy	

NAG 5-1905 Massachusetts Institute of Technology 4926
STRATEGIES FOR SPACE GEODETIC MONITORING OF INFRAS EISMIC AND SUBSEISMIC TRANSIENT DEFORMATIONS

Period	FY94:	Obligations	TOTAL:
02/20/1992-02/28/1995	\$53,000		\$150,870
Prin. Invest.	NASA Tech. Officer	CASE Category	
T H JORDAN	GSFC/B G BILLS	32-Geological Sci	

NAG 5-1906 Massachusetts Institute of Technology 4927
STUDIES OF ERROR SOURCES IN GEODETIC VLBI

Period	FY94:	Obligations	TOTAL:
02/21/1992-02/28/1995	\$63,000		\$182,637
Prin. Invest.	NASA Tech. Officer	CASE Category	
A E ROGERS	GSFC/B G BILLS	32-Geological Sci	

NAG 5-1911 Massachusetts Institute of Technology 4928
CRUSTAL DEFORMATION FROM SURFACE AND INTERNAL LOADS

Period	FY94:	Obligations	TOTAL:
02/26/1992-02/28/1995	\$88,000		\$222,000
Prin. Invest.	NASA Tech. Officer	CASE Category	
B H HAGER	GSFC/B G BILLS	32-Geological Sci	

NAG 5-1921 Massachusetts Institute of Technology 4929
LITHOSPHERIC DYNAMICS NEAR PLATE BOUNDARIES

Period	FY94:	Obligations	TOTAL:
03/04/1992-05/14/1993	\$1,073		\$79,935
Prin. Invest.	NASA Tech. Officer	CASE Category	
S C SOLOMAN	GSFC/B G BILLS	32-Geological Sci	

NAG 5-1947 Massachusetts Institute of Technology 4930
GPS SURVEY OF THE WESTERN TIEN SHAN PROPOSAL

Period	FY94:	Obligations	TOTAL:
03/16/1992-03/14/1995	\$65,000		\$180,000
Prin. Invest.	NASA Tech. Officer	CASE Category	
P MOLNAR	GSFC/B G BILLS	31-Atmos Sci	

NAG 5-1951 Massachusetts Institute of Technology 4931
SPECTRA OF HIGH REDSHIFT RADIO QUIET QUASARS

Period	FY94:	Obligations	TOTAL:
03/18/1992-12/31/1995	\$35,000		\$65,000
Prin. Invest.	NASA Tech. Officer	CASE Category	
C R CANIZARES	GSFC/R PETRE	11-Astronomy	

NAG 5-1983 Massachusetts Institute of Technology 4932
ROSAT STUDIES OF GLOBULAR CLUSTER X-RAY SOURCES

Period	FY94:	Obligations	TOTAL:
05/12/1992-05/31/1994	\$0		\$30,000
Prin. Invest.	NASA Tech. Officer	CASE Category	
	GSFC/R PETRE	11-Astronomy	

NAG 5-1993 Massachusetts Institute of Technology 4933
SEARCH FOR CHAOS IN THE RAPID BURSTER

Period	FY94:	Obligations	TOTAL:
06/12/1992-06/14/1994			\$30,673
Prin. Invest.	NASA Tech. Officer	CASE Category	
S RAPPAPORT	GSFC/D WEST	11-Astronomy	

NAG 5-2030 Massachusetts Institute of Technology 4934
SEARCH FOR SOFT GAMMA-RAY EVENTS (25-55 KEV) IN THE BATSE

Period	FY94:	Obligations	TOTAL:
07/08/1992-01/14/1994			\$59,956
Prin. Invest.	NASA Tech. Officer	CASE Category	
W H LEWIN	GSFC/J P NORRIS	11-Astronomy	
J VANPARADIS	GSFC/N WHITE		

NASA'S UNIVERSITY PROGRAM MASSACHUSETTS (Continued)

NAG 5-2046 Massachusetts Institute of Technology 4935

PULSE TIMING OF VELA X-1

Period	Obligations	
07/28/1992-07/31/1995	FY94: \$74,500	TOTAL: \$84,500
Prin. Invest.	NASA Tech. Officer	CASE Category
W H LEWIN	GSFC/J P NORRIS	11-Astronomy
M VAN DER KLIS	GSFC/N WHITE	

NAG 5-2165 Massachusetts Institute of Technology 4936

ACCURATE, SIMULTANEOUS GAMMA RAY BURST POSITION DETERMINATION USING THE BURST AND TRANSIENT. . . .

Period	Obligations	
12/31/1992-12/31/1994	FY94: \$0	TOTAL: \$50,000
Prin. Invest.	NASA Tech. Officer	CASE Category
G R RICKER	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2185 Massachusetts Institute of Technology 4937

PARTICIPATION IN THE MARS OBSERVER LASER ALTIMETER (MOLA) TEAM

Period	Obligations	
02/09/1993-02/14/1995	FY94: \$0	TOTAL: \$59,935
Prin. Invest.	NASA Tech. Officer	CASE Category
G H PETTENGILL	GSFC/D E SMITH	11-Astronomy

NAG 5-2230 Massachusetts Institute of Technology 4938

A STUDY OF 4 SUPERNOVA REMNANT-RICH FIELDS IN THE CARINA SPIRAL ARM

Period	Obligations	
03/23/1993-09/30/1994	FY94: \$0	TOTAL: \$20,000
Prin. Invest.	NASA Tech. Officer	CASE Category
T H MARKERT	GSFC/R PETRE	11-Astronomy

NAG 5-2255 Massachusetts Institute of Technology 4939

MICRO/MESOSCALE PHENOMENA OF CHARGED PARTICLE ENERGIZATION, DIFFUSION AND TRANSPORT

Period	Obligations	
04/27/1993-04/30/1995	FY94: \$265,000	TOTAL: \$405,119
Prin. Invest.	NASA Tech. Officer	CASE Category
T CHANG	GSFC/T J BIRMINGHAM	13-Physics
	GSFC/J D BOHLIN	

NAG 5-2490 Massachusetts Institute of Technology 4940

FACTORS CONTROLLING POLEWARD HEAT TRANSPORT IN CLIMATE MODELS

Period	Obligations	
01/27/1994-01/31/1995	FY94: \$50,640	TOTAL: \$50,640
Prin. Invest.	NASA Tech. Officer	CASE Category
P H STONE	GSFC/D G DUFFY	31-Atmos Sci

NAG 5-2536 Massachusetts Institute of Technology 4941

SEARCHING FOR THE BASE OF THE GALACTIC HALO: IUE OBSERVATIONS OF HIGHLY IONIZED GAS IN INTERARM. . .

Period	Obligations	
03/09/1994-03/14/1995	FY94: \$1,500	TOTAL: \$1,500
Prin. Invest.	NASA Tech. Officer	CASE Category
K SEMBACH	GSFC/D WEST	11-Astronomy

NAG 5-2540 Massachusetts Institute of Technology 4942

SPECTROSCOPIC STUDY OF LMC X-4 ECLIPSE PHENOMENA

Period	Obligations	
02/28/1994-03/14/1995	FY94: \$12,000	TOTAL: \$12,000
Prin. Invest.	NASA Tech. Officer	CASE Category
G W CLARK	GSFC/N WHITE	11-Astronomy

NAG 5-2541 Massachusetts Institute of Technology 4943

OBSERVATIONS OF DISTANT, X-RAY SELECTED CLUSTERS OF GALAXIES

Period	Obligations	
02/28/1994-03/14/1995	FY94: \$8,000	TOTAL: \$8,000
Prin. Invest.	NASA Tech. Officer	CASE Category
M W BAUTE	GSFC/N WHITE	11-Astronomy

NAG 5-2542 Massachusetts Institute of Technology 4944

X-RAY SPECTRAL STUDY OF THE SUPERNOVA REMNANT G296.1-0.7

Period	Obligations	
02/24/1994-03/14/1995	FY94: \$16,922	TOTAL: \$16,922
Prin. Invest.	NASA Tech. Officer	CASE Category
T H MARKERT	GSFC/N WHITE	11-Astronomy

NAG 5-2545 Massachusetts Institute of Technology 4945

IMPROVED PASSIVE MICROWAVE SOUNDING OF THE ATMOSPHERE

Period	Obligations	
03/09/1994-03/14/1995	FY94: \$135,000	TOTAL: \$135,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D H STAELIN	GSFC/J SHIUE	31-Atmos Sci

NAG 5-2582 Massachusetts Institute of Technology 4946

PARTICIPATION IN ASHOE/MAESA EXPERIMENT

Period	Obligations	
04/21/1994-04/30/1995	FY94: \$80,000	TOTAL: \$80,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R A PLUMB	GSFC/R W STEWART	31-Atmos Sci

NAG 5-2632 Massachusetts Institute of Technology 4947

ROSAT STUDIES OF TRANSIENT BINARY X-RAY PULSARS

Period	Obligations	
06/23/1994-12/31/1995	FY94: \$20,000	TOTAL: \$20,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P JOSS	GSFC/R PETRE	11-Astronomy

NAG 5-2661 Massachusetts Institute of Technology 4948

LOW LUMINOSITY X-RAY SOURCE(S) IN 47-TUC, SPECTRAL AND IMAGING STUDIES OF THE SUPERNOVA REMNANT PKS

Period	Obligations	
07/21/1994-07/31/1995	FY94: \$32,500	TOTAL: \$32,500
Prin. Invest.	NASA Tech. Officer	CASE Category
S RAPPAPORT	GSFC/N WHITE	11-Astronomy

NAG 5-2685 Massachusetts Institute of Technology 4949

CONTINUATION OF RESEARCH AND IN ORBIT MONITORING OF THE SOLID STATE IMAGING SPECTROMETER

Period	Obligations	
08/11/1994-08/14/1995	FY94: \$327,000	TOTAL: \$327,000
Prin. Invest.	NASA Tech. Officer	CASE Category
G RICKER	GSFC/N WHITE	11-Astronomy

NAG 5-2734 Massachusetts Institute of Technology 4950

X-RAY BURST SPECTROSCOPY

Period	Obligations	
09/21/1994-03/31/1996	FY94: \$15,000	TOTAL: \$15,000
Prin. Invest.	NASA Tech. Officer	CASE Category
W LEWIS	GSFC/N WHITE	11-Astronomy

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAG 8-185 Massachusetts Institute of Technology 4951
DETERMINATION OF THE ATMOSPHERIC STRUCTURE OF THE
BO-STAR COMPANION OF SMC X-1 BY ANALYSIS OF DATA
Period Obligations
03/25/1991-07/09/1994 FY94: \$0 TOTAL: \$99,316
Prin. Invest. NASA Tech. Officer CASE Category
G W CLARK MSFC/J V VARGAS 31-Atmos Sci

NAG 8-285 Massachusetts Institute of Technology 4952
MASSIVE X-RAY BINARIES WITH GINGA
Period Obligations
03/16/1993-03/15/1995 FY94: \$20,000 TOTAL: \$59,574
Prin. Invest. NASA Tech. Officer CASE Category
S RAPPAPORT MSFC/J VARGAS 11-Astronomy
A M LEVINE

NAG 8-286 Massachusetts Institute of Technology 4953
SYSTEMATIC STUDY OF BLACK HOLE CANDIDATES
Period Obligations
03/31/1993-03/30/1995 FY94: \$78,323 TOTAL: \$149,430
Prin. Invest. NASA Tech. Officer CASE Category
W H LEWIN MSFC/J VARGAS 11-Astronomy

NAG 8-295 Massachusetts Institute of Technology 4954
MODELING OF OUTGASSING AND MATRIX DECOMPOSITION IN
CARBON-PHENOLIC COMPOSITES
Period Obligations
05/20/1993-08/31/1995 FY94: \$0 TOTAL: \$108,766
Prin. Invest. NASA Tech. Officer CASE Category
H L MCMANUS MSFC/R M SULLIVAN 49-Engr, NEC
MSFC/R G CLINTON

NAG 8-691 Massachusetts Institute of Technology 4955
GRANT ENTITLED 'STUDIES OF HEAO-MC IDENTIFIED OBJECTS
WITH ASTRO-C VISITOR INVESTIGATING PROGRAM.'
Period Obligations
12/01/1987-09/30/1993 FY94: TOTAL: \$144,563
Prin. Invest. NASA Tech. Officer CASE Category
H BRADT MSFC/D HAVRISIK 11-Astronomy

NAG 8-935 Massachusetts Institute of Technology 4956
R/S 'PRECIPITATION AND LIGHTNING IN TROPICAL CONVECTION'
Period Obligations
09/08/1992-09/08/1994 FY94: \$63,250 TOTAL: \$123,480
Prin. Invest. NASA Tech. Officer CASE Category
E R WILLIAMS MSFC/H J CHRISTIAN 31-Atmos Sci

NAG 8-949 Massachusetts Institute of Technology 4957
BSO/BTO IDENTIFICATION OF GRAVITY RELATED EFFECTS ON
CRYSTAL GROWTH, SEGREGATION AND DEFECT FORMATION
Period Obligations
01/28/1993-01/27/1995 FY94: \$200,000 TOTAL: \$398,883
Prin. Invest. NASA Tech. Officer CASE Category
A F WITT MSFC/E C ETHRIDGE 19-Phys Sci, NEC

NAG 8-951 Massachusetts Institute of Technology 4958
INTERFACIAL TRANSPORT AND KICELLAR SOLUBILIZATON
PROCESS
Period Obligations
01/22/1993-01/14/1995 FY94: \$110,000 TOTAL: \$278,000
Prin. Invest. NASA Tech. Officer CASE Category
T A HATTON MSFC/B FACEMIRE 43-Chem Engr

NAG 8-961 Massachusetts Institute of Technology 4959
MODEL CONVECTION AND CRYSTAL GROWTH IN DIRECT SOLIDI
FICATION OF SEMICONDUCTOR AND OXIDES MATERIALS
Period Obligations
06/15/1993-06/30/1995 FY94: \$125,000 TOTAL: \$250,000
Prin. Invest. NASA Tech. Officer CASE Category
R A BROWN MSFC/S L LEHOCZKY 43-Chem Engr

NAG 8-962 Massachusetts Institute of Technology 4960
MICROSTRUCTURE FORMATION WHILE DIRECT SOLIDIFICATI ON
OF BINARY ALLOYS WITH NO COVECTION
Period Obligations
07/15/1993-06/30/1995 FY94: \$125,000 TOTAL: \$250,000
Prin. Invest. NASA Tech. Officer CASE Category
R A BROWN MSFC/F R SZOFRAN 43-Chem Engr

NAG 8-970 Massachusetts Institute of Technology 4961
MEASUREMENTS OF THE VISCOSITY OF UNDERCOOLED MELTS
UNDER THE CORDIOUS OF MICROGRAVITY AND SUPPORTI
Period Obligations
05/21/1993-02/28/1994 FY94: \$0 TOTAL: \$109,995
Prin. Invest. NASA Tech. Officer CASE Category
J SZEKELY MSFC/R C DARTY 12-Chemistry

NAG 8-971 Massachusetts Institute of Technology 4962
ALLOY UNDERCOOLING EXPERIMENTS
Period Obligations
03/19/1993-03/18/1995 FY94: \$243,000 TOTAL: \$439,998
Prin. Invest. NASA Tech. Officer CASE Category
M FLEMINGS MSFC/R C DARTY 13-Physics

NAG 8-980 Massachusetts Institute of Technology 4963
DETERMINE HEAT PIPE PERFORMANCE MELT/CONFINEMENT
INTERACTION UNDER LESS GRAVITY
Period Obligations
07/16/1993-09/30/1994 FY94: \$0 TOTAL: \$59,955
Prin. Invest. NASA Tech. Officer CASE Category
H E WITT MSFC/R C DARTY 13-Physics

NAG 8-1069 Massachusetts Institute of Technology 4964
DROPLETS RESEARCH
Period Obligations
09/12/1994-09/11/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
J SZEKELY MSFC/M B ROBINSON 19-Phys Sci, NEC
MSFC/B SCHRICK

NAG 8-1078 Massachusetts Institute of Technology 4965
VISCOSITY MEASUREMENTS
Period Obligations
05/01/1994-04/30/1995 FY94: \$108,826 TOTAL: \$108,826
Prin. Invest. NASA Tech. Officer CASE Category
J SZEKELY MSFC/R C DARTY 12-Chemistry

NAG 9-108 Massachusetts Institute of Technology 4966
NON-EQUILIBRIUM CHEMISTRY/EARLY SOLAR SY
Period Obligations
05/01/1985-05/01/1994 FY94: \$0 TOTAL: \$345,010
Prin. Invest. NASA Tech. Officer CASE Category
R G PRINN JSC/I D BROWNE 47-Materials Engr

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAG 9-125 Massachusetts Institute of Technology 4967
DISPLAY ORIENTATION + GRAPHIC INPUT DEVI
Period *Obligations*
07/22/1985-02/01/1994 FY94: TOTAL: \$1,004,821
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H C ALEXANDER JSC/L A LUTZ 39-Env Sci, NEC
B K LICHTENBERG JSC/L S EVANS

NAG 9-302 Massachusetts Institute of Technology 4968
CRYSTALLIZATION PROCESS IN EUCRITE BODY
Period *Obligations*
07/11/1988-07/01/1994 FY94: \$0 TOTAL: \$189,590
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T L GROVE JSC/I D BROWNE 32-Geological Sci

NAG 9-602 Massachusetts Institute of Technology 4969
EFFECT OF MICROGRAVITY ON MICROBIAL SECONDARY METABOLISM
Period *Obligations*
05/05/1992-05/01/1995 FY94: \$100,000 TOTAL: \$246,648
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L DEMAIN JSC/D L PIERSON 51-Biological Sci

NAG 9-655 Massachusetts Institute of Technology 4970
MICROGRAVITY STUDIES OF CELL POLYMER CARTILAGE IMPLANTS
Period *Obligations*
01/22/1993-03/01/1994 FY94: \$160,000 TOTAL: \$310,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L E FREED JSC/G SPAULDING 51-Biological Sci

NAG 9-678 Massachusetts Institute of Technology 4971
STABLE GRASPING OF OBJECTS USING VISION AND TOUCH INFORMATION: STATIC CYLINDERS
Period *Obligations*
04/01/1993-10/01/1994 FY94: \$0 TOTAL: \$33,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J K SALISBURY JSC/L LI 46-Mech Engr

NAG 9-694 Massachusetts Institute of Technology 4972
INTERNSHIP PROGRAM
Period *Obligations*
05/26/1993-04/30/1995 FY94: \$24,906 TOTAL: \$49,129
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L KERREBROCK JSC/S H GOLDSTEIN 41-Aero Engr

NAGW 474 Massachusetts Institute of Technology 4973
INTERPRETATION OF NIMBUS-7 AND SAGE-1 AEROSOL AND TRACE GAS DATA USING THREE-DIMENSIONAL MODELS
Period *Obligations*
06/17/1983-12/31/1994 FY94: \$121,400 TOTAL: \$1,095,654
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G PRINN HQ/J A KAYE 31-Atmos Sci
HQ/R E MURPHY

NAGW 525 Massachusetts Institute of Technology 4974
STUDIES OF GLOBAL SCALE EVALUATION PROCESS OF THE EARTH'S ATMOSPHERE
Period *Obligations*
11/01/1983-09/30/1995 FY94: \$78,420 TOTAL: \$1,550,575
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R S LINDZEN HQ/R K KAKAR 31-Atmos Sci
R DOLE HQ/J THEON

NAGW 706 Massachusetts Institute of Technology 4975
SOLAR SYSTEM DYNAMICS
Period *Obligations*
02/01/1985-09/30/1994 FY94: \$100,840 TOTAL: \$631,523
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J WISDOM HQ/J R UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 732 Massachusetts Institute of Technology 4976
GLOBAL ATMOSPHERIC GASES EXPERIMENT (GAGE)
Period *Obligations*
11/01/1984-01/31/1995 FY94: \$357,260 TOTAL: \$1,805,399
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G PRINN HQ/R D MCPETERS 31-Atmos Sci
HQ/M J PRATHER

NAGW 1048 Massachusetts Institute of Technology 4977
FOUR MONTH NCE THROUGH 2/28/89 UNDER NEW CLAUSE
Period *Obligations*
05/01/1987-02/28/1994 FY94: \$0 TOTAL: \$1,037,035
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C WUNSCH HQ/J G RICHMAN 33-Oceanography
HQ/W S WILSON

NAGW 1272 Massachusetts Institute of Technology 4978
SEA STATE BIAS IN RADAR ALTIMETRY
Period *Obligations*
04/07/1988-09/30/1992 FY94: \$0 TOTAL: \$760,579
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W K MELVILLE HQ/G S LAGERLOEF 33-Oceanography
HQ/W S WILSON

NAGW 1335 Massachusetts Institute of Technology 4979
CENTER FOR SPACE ENGINEERING RESEARCH
Period *Obligations*
08/09/1988-10/31/1994 FY94: \$1,450,001 TOTAL: \$8,384,251
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E F CRAWLEY HQ/G I JOHNSTON 49-Engr, NEC

NAGW 1386 Massachusetts Institute of Technology 4980
A STUDY OF INTERFEROMETRIC METHODS FOR THE DETCTRON PLANETS
Period *Obligations*
08/03/1988-06/30/1995 FY94: \$72,000 TOTAL: \$450,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B I BURKE HQ/C PILCHER 11-Astronomy

NAGW 1450 Massachusetts Institute of Technology 4981
PHOTOMETRY OF PLUTO-CHARON MUTUAL EVENTS
Period *Obligations*
08/23/1988-09/30/1994 FY94: \$48,000 TOTAL: \$263,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R BINZEL HQ/J H RAHE 11-Astronomy

NAGW 1494 Massachusetts Institute of Technology 4982
OCCULTATION STUDIES OF THE SOLAR SYSTEM
Period *Obligations*
12/12/1988-11/30/1994 FY94: \$67,200 TOTAL: \$465,780
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L ELLIOT HQ/J H RAHE 11-Astronomy

NASA'S UNIVERSITY PROGRAM MASSACHUSETTS (Continued)

NAGW 1532 Massachusetts Institute of Technology 4983
PLASMA TURBULENCE AND PARTICLE ACCELERATION IN THE

Period	Obligations	
11/29/1988-12/31/1994	FY94: \$88,001	TOTAL: \$409,802
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T S CHANG	HQ/M M MELLOTT	13-Physics
	HQ/T W PERRY	

NAGW 1545 Massachusetts Institute of Technology 4984
THEORETICAL STUDIES OF COLLAPSED OBJECTS IN BINARY

Period	Obligations	
12/01/1988-12/31/1994	FY94: \$63,000	TOTAL: \$339,004
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P C JOSS	HQ/L J KALUZIENSKI	11-Astronomy
S RAPPAPORT	HQ/A N BUNNER	

NAGW 1550 Massachusetts Institute of Technology 4985
INVESTIGATIONS OF THE INTERPLANETARY MEDIUM

Period	Obligations	
12/06/1988-11/30/1994	FY94: \$65,000	TOTAL: \$570,130
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A J LAZARUS	HQ/M M MELLOTT	13-Physics
	HQ/W V JONES	

NAGW 1617 Massachusetts Institute of Technology 4986
REMOTE SENSING OF EARTH TERRAIN

Period	Obligations	
01/19/1989-12/31/1994	FY94: \$60,000	TOTAL: \$570,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A KONG	HQ/G ASRAR	13-Physics

NAGW 1667 Massachusetts Institute of Technology 4987
INELASTIC COLLISION PROCESSES IN OZONE AND THEIR RELATION

Period	Obligations	
03/08/1989-05/31/1995	FY94: \$80,000	TOTAL: \$445,959
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J I STEINFELD	HQ/M J KURYLO	31-Atmos Sci
	HQ/S G TILFORD	

NAGW 1727 Massachusetts Institute of Technology 4988
LARGE-SCALE DYNAMICS AND TRANSPORT IN THE STRATOSPHERE

Period	Obligations	
03/17/1989-02/28/1995	FY94: \$155,010	TOTAL: \$670,479
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A PLUMB	HQ/R D MCPETERS	31-Atmos Sci
	HQ/M J PRATHER	

NAGW 1841 Massachusetts Institute of Technology 4989
ASTRONOMY IN THE REGION BETWEEN 1MM AND .1 MM WAVE LENGTHS

Period	Obligations	
01/24/1990-10/31/1993	FY94: \$0	TOTAL: \$358,826
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S S MEYER	HQ/G LEVY	19-Phys Sci, NEC

NAGW 1937 Massachusetts Institute of Technology 4990
TECTONIC HISTORY OF THE TERRESTRIAL PLANETS

Period	Obligations	
02/20/1990-09/30/1992	FY94: \$0	TOTAL: \$472,560
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S C SOLOMON	HQ/T A MAXWELL	32-Geological Sci

NAGW 1951 Massachusetts Institute of Technology 4991
PROPOSAL FOR THE STUDY OF RATES AND GEOMETRIES OF DEFORMATION IN AN ACTIVE 'BACK-ARC' EX. REGIME

Period	Obligations	
04/19/1990-09/30/1994	FY94: \$0	TOTAL: \$160,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L H ROYDEN	HQ/M BALTUCK	51-Biological Sci

NAGW 1961 Massachusetts Institute of Technology 4992
NAGW-1961/MASS INSTITUTE OF TECHNOLOGY/GPS DENSIFICATION OF THE SLR NETWORK IN TURKEY

Period	Obligations	
04/18/1990-12/31/1993	FY94: \$0	TOTAL: \$286,990
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M N TOKSOZ	HQ/M BALTUCK	19-Phys Sci, NEC

NAGW 2003 Massachusetts Institute of Technology 4993
EXPERIMENTAL AND OBSERVATIONAL INVESTIGATIONS IN HIGH ENERGY ASTROPHYSICS

Period	Obligations	
04/20/1990-12/31/1996	FY94: \$125,000	TOTAL: \$1,799,570
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G CLARK	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

NAGW 2014 Massachusetts Institute of Technology 4994
SPACE ENGINEERING (SECTION II)

Period	Obligations	
02/28/1990-03/31/1994	FY94: \$0	TOTAL: \$465,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E F CRAWLEY	HQ/E W BULL	49-Engr, NEC
E CRAWLEY	HQ/S L VENNERI	
J W MAR		

NAGW 2048 Massachusetts Institute of Technology 4995
SPACE-TIME EVOLUTION OF CYCLOTRON MASER INSTABILITIES GENERATING AURORAL KILOMETRIC RADIATION

Period	Obligations	
05/08/1990-03/31/1994	FY94: \$0	TOTAL: \$222,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A BERS	HQ/M M MELLOTT	13-Physics
	HQ/T PERRY	

NAGW 2049 Massachusetts Institute of Technology 4996
ELECTRONIC SPECTRA OF MATERIALS SIMULATING PLANETARY SURFACES: OXIDATION PRODUCTS ON MARS AND VENUS

Period	Obligations	
04/05/1990-10/31/1994	FY94: \$65,000	TOTAL: \$259,200
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R BURNS	HQ/T A MAXWELL	32-Geological Sci

NAGW 2089 Massachusetts Institute of Technology 4997
CONTINUED DEVELOPMENT OF AN EXPLOSIVE TRANSIENT CAMERA FOR IDENTIFICATION OF GAMMA RAY BURST SOURCE

Period	Obligations	
06/06/1990-11/30/1994	FY94: \$173,000	TOTAL: \$1,263,848
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G RICKER	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAGW 2155 Massachusetts Institute of Technology 4998
NAGW-2155/MASS INSTITUTE TECHNOLOGY/GEODETIC, REMO TE
SENSING, GEOLOGICAL AND GEOPHYSICAL STUDY
Period Obligations
08/08/1990-05/31/1995 FY94: \$89,540 TOTAL: \$405,000
Prin. Invest. NASA Tech. Officer CASE Category
B G BURCHFIEL HQ/M BALTUCK 32-Geological Sci
HQ/T PIEPER

NAGW 2161 Massachusetts Institute of Technology 4999
CONVECTION IN VENUS: OBSERVATIONS, MODELS AND COM
PARISON WITH EARTH
Period Obligations
06/13/1990-12/31/1994 FY94: \$29,999 TOTAL: \$209,999
Prin. Invest. NASA Tech. Officer CASE Category
B H HAGER HQ/T A MAXWELL 32-Geological Sci

NAGW 2190 Massachusetts Institute of Technology 5000
NAGW-2190/MASS INSTITUTE OF TECHNOLOGY/LABORATORY
CHEMISTRY OF CHLORINE AND FLUORINE COMPOUNDS
Period Obligations
08/08/1990-12/31/1994 FY94: \$189,590 TOTAL: \$981,495
Prin. Invest. NASA Tech. Officer CASE Category
M J MOLINA HQ/M J KURYLO 31-Atmos Sci
HQ/R T WATSON

NAGW 2220 Massachusetts Institute of Technology 5001
TEMPORAL VARIATIONS OF PH AND IRON OXIDATION STATE ON
MARS
Period Obligations
05/21/1991-10/31/1994 FY94: \$0 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
R G BURNS HQ/T A MAXWELL 32-Geological Sci

NAGW 2310 Massachusetts Institute of Technology 5002
NAGW-2310/MASS INSTITUTE TECHNOLOGY/THE FEASIBILT Y OF
A RADIO ASTROMETRIC SEARCH FOR PLANETARY
Period Obligations
01/23/1991-10/31/1993 FY94: \$0 TOTAL: \$135,000
Prin. Invest. NASA Tech. Officer CASE Category
J N HEWITT HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2341 Massachusetts Institute of Technology 5003
THE PREBIOTIC SYNTHESIS OF POLYNUCLEOTIDES AND POL
YNUCLEOTIDE DIRECTED POLYPEPTIDES
Period Obligations
02/14/1991-11/30/1994 FY94: \$69,529 TOTAL: \$267,529
Prin. Invest. NASA Tech. Officer CASE Category
A RICH HQ/J D RUMMEL 51-Biological Sci

NAGW 2385 Massachusetts Institute of Technology 5004
ANALYSIS OF VARIATIONS IN NEPTUNE'S ATMOSPHERE COR
RELATED SPACECRAFT/GROUND-BASED IMAGING AND PHOTO
Period Obligations
05/21/1991-02/28/1994 FY94: \$0 TOTAL: \$251,250
Prin. Invest. NASA Tech. Officer CASE Category
H B HAMMEL HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2387 Massachusetts Institute of Technology 5005
NAGW-2387/MASS INSTITUTE TECHNOLOGY/SPECTRAL LINE
POSITIONS, INTENSITIES, AND ASSIGNMENTS FOR METHANE
Period Obligations
06/04/1991-06/30/1995 FY94: \$35,000 TOTAL: \$192,500
Prin. Invest. NASA Tech. Officer CASE Category
J I STEINFELD HQ/J T BERGSTRALH 11-Astronomy

NAGW 2403 Massachusetts Institute of Technology 5006
DETAILED ANALYSIS OF LOW ENERGY PLASMA DATA
Period Obligations
06/10/1991-03/31/1994 FY94: \$0 TOTAL: \$445,999
Prin. Invest. NASA Tech. Officer CASE Category
J W BELCHER HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2629 Massachusetts Institute of Technology 5007
NAGW-2629/MASS INSTITUTE TECHNOLOGY/ANALYSIS OF GR
AVITY, MAGNETIC AND SEISMIC REFLECTION DATA FROM TI
Period Obligations
07/22/1991-01/31/1994 FY94: \$0 TOTAL: \$228,748
Prin. Invest. NASA Tech. Officer CASE Category
M MCNUTT HQ/M BALTUCK 32-Geological Sci

NAGW 2674 Massachusetts Institute of Technology 5008
FLUID MECHANICS AND MASS TRANSFER IN MELT CRYSTAL
GROWTH: MACRO- AND MICRO-SCALE ANALYSIS
Period Obligations
08/20/1991-06/30/1993 FY94: \$0 TOTAL: \$361,000
Prin. Invest. NASA Tech. Officer CASE Category
R A BROWN HQ/B M CARPENTER 19-Phys Sci, NEC

NAGW 2711 Massachusetts Institute of Technology 5009
THE APPLICATION OF THE ADJOINT METHOD TO THE CME
Period Obligations
09/04/1991-08/31/1994 FY94: \$0 TOTAL: \$431,140
Prin. Invest. NASA Tech. Officer CASE Category
P MALANOTTE-RIZZO HQ/D ADAMEO 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 2795 Massachusetts Institute of Technology 5010
EVOLUTION OF LATE ARCHEAN CARBONATE SEDIMENTS, STR
OMATOLITES, AND ENVIRONMENTS
Period Obligations
12/18/1991-12/31/1994 FY94: \$80,000 TOTAL: \$228,979
Prin. Invest. NASA Tech. Officer CASE Category
J P GROTZINGER HQ/J D RUMMEL 32-Geological Sci

NAGW 2807 Massachusetts Institute of Technology 5011
INFRARED EMISSION OF MICROWAVE BACKGROUND ANISOTRO
PHY FROM COSMOLOGICAL N-BODY SIMULATIONS
Period Obligations
01/06/1992-03/31/1995 FY94: \$40,000 TOTAL: \$115,060
Prin. Invest. NASA Tech. Officer CASE Category
E BERTSCHINGER HQ/L J CAROFF 11-Astronomy

NAGW 2812 Massachusetts Institute of Technology 5012
PLANETARY RINGS: OBSERVATION AND ANALYSIS
Period Obligations
01/03/1992-10/31/1993 FY94: \$0 TOTAL: \$55,000
Prin. Invest. NASA Tech. Officer CASE Category
J L ELLIOT HQ/W L QUAIDE 11-Astronomy

NAGW 2891 Massachusetts Institute of Technology 5013
PROPOSAL FOR DIAGNOSTIC ANALYSIS AND NUMERICAL MOD
ELING OF NEPTUNE'S ATMOSPHERIC DYNAMICS
Period Obligations
02/26/1992-03/31/1994 FY94: \$0 TOTAL: \$104,630
Prin. Invest. NASA Tech. Officer CASE Category
T E DOWLING HQ/W L QUAIDE 19-Phys Sci, NEC

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAGW 2942 Massachusetts Institute of Technology 5014
A COUPLED REMOTE SENSINGS AND MODELING APPROACH TO
ESTIMATION OF MOISTURE AND TEMPERATURE:

<i>Period</i>	<i>Obligations</i>	
02/28/1992-12/31/1994	FY94: \$53,365	TOTAL: \$148,417
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D ENTEKHABI	HQ/R E MURPHY	39-Env Sci, NEC
	HQ/D M BUTLER	

NAGW 2956 Massachusetts Institute of Technology 5015
GENERAL CIRCULATION OF PLANETARY ATMOSPHERES

<i>Period</i>	<i>Obligations</i>	
03/03/1992-12/31/1994	FY94: \$54,036	TOTAL: \$156,406
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T E DOWLING	HQ/W L QUAIDE	11-Astronomy

NAGW 3007 Massachusetts Institute of Technology 5016
ANALYSIS OF SPACE GEODETIC MEASUREMENTS FOR STUDYING
THE DYNAMICS OF SOLID EARTH

<i>Period</i>	<i>Obligations</i>	
03/20/1992-12/31/1994	FY94: \$130,000	TOTAL: \$385,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T A HERRING	HQ/R E MURPHY	32-Geological Sci
	HQ/D M BUTLER	

NAGW 3036 Massachusetts Institute of Technology 5017
INVERSION OF GRAVITY AND BATHYMETRY IN OCEANIC REGIONS
FOR LONG-WAVE LENGTH VARIATIONS

<i>Period</i>	<i>Obligations</i>	
04/03/1992-06/30/1993	FY94: \$0	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T H JORDAN	HQ/R E MURPHY	32-Geological Sci
	HQ/D M BUTLER	

NAGW 3100 Massachusetts Institute of Technology 5018
AFRICAN CLIMATE AND VEGETATION STUDIES RELATED TO THE
HAPEX SAHEL EXPERIMENT

<i>Period</i>	<i>Obligations</i>	
06/22/1992-07/31/1993	FY94: \$0	TOTAL: \$28,272
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D ENTEKHABI	HQ/R E MURPHY	31-Atmos Sci
S N NICHOLSON	HQ/D E WICKLAND	

NAGW 3234 Massachusetts Institute of Technology 5019
NAGW-3234/MASS INSTITUTE TECHNOLOGY/STUDIES OF X-RAY
POPULATIONS IN THE NEARBY GALAXY M31

<i>Period</i>	<i>Obligations</i>	
11/02/1992-09/30/1993	FY94: \$0	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W LEWIN	HQ/G R RIEGLER	11-Astronomy

NAGW 3292 Massachusetts Institute of Technology 5020
NAGW-3292/MIT/COLLISIONAL EVOLUTION OF KORONIS FAMILY
ASTEROIDS

<i>Period</i>	<i>Obligations</i>	
12/10/1992-09/30/1994	FY94: \$0	TOTAL: \$34,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R P BINZEL	HQ/H C BRINTON	11-Astronomy

NAGW 3296 Massachusetts Institute of Technology 5021
PLUTO-CHARON PHYSICAL STUDIES WITH OBSERVATIONS FROM
MAUNA KEA

<i>Period</i>	<i>Obligations</i>	
01/06/1993-11/30/1994	FY94: \$33,600	TOTAL: \$68,600
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L ELLIOT	HQ/H C BRINTON	11-Astronomy

NAGW 3310 Massachusetts Institute of Technology 5022
NAGW-3310/MASS INSTITUTE OF TECHNOLOGY/VERTICAL
AEROSOL DISTRIBUTION ON NEPTUNE AND URANUS

<i>Period</i>	<i>Obligations</i>	
01/06/1993-06/30/1995	FY94: \$28,800	TOTAL: \$68,730
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H B HAMMEL	HQ/H C BRINTON	11-Astronomy

NAGW 3422 Massachusetts Institute of Technology 5023
STUDIES OF ACTIVE COOL STARS

<i>Period</i>	<i>Obligations</i>	
02/25/1993-06/30/1995	FY94: \$43,210	TOTAL: \$92,273
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D P HUENEMOERDER	HQ/R V STACHNIK	11-Astronomy
	HQ/E J WEILER	

NAGW 3462 Massachusetts Institute of Technology 5024
ORGANIZATION AND CONDUCT OF THE NINTH AMERICAN
CONFERENCE

<i>Period</i>	<i>Obligations</i>	
03/23/1993-12/31/1993	FY94: \$0	TOTAL: \$10,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A F WITT	HQ/C RAY	19-Phys Sci, NEC

NAGW 3511 Massachusetts Institute of Technology 5025
THEORETICAL STUDY OF HIGH FREQUENCY SOLAR ACOUSTIC AL
OSCILLATIONS

<i>Period</i>	<i>Obligations</i>	
04/06/1993-01/31/1994	FY94: \$0	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P KUMAR	HQ/W J WAGNER	13-Physics
	HQ/J D BOHLIN	

NAGW 3586 Massachusetts Institute of Technology 5026
PHASE EQUILIBRIUM INVESTIGATIONS OF PLANETARY MATERIALS

<i>Period</i>	<i>Obligations</i>	
05/12/1993-06/30/1995	FY94: \$49,990	TOTAL: \$91,705
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T GROVE	HQ/J BOYCE	32-Geological Sci

NAGW 3608 Massachusetts Institute of Technology 5027
NON-EQUILIBRIUM CHEMISTRY OF THE EARLY SOLAR SYSTEM

<i>Period</i>	<i>Obligations</i>	
05/21/1993-04/30/1994	FY94: \$0	TOTAL: \$38,400
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R PRIINN	HQ/J BOYCE	32-Geological Sci

NAGW 3787 Massachusetts Institute of Technology 5028
INVESTIGATION OF VENUS SURFACE ELECTRICAL AND MECHANICAL

<i>Period</i>	<i>Obligations</i>	
10/06/1993-06/30/1994	FY94: \$140,000	TOTAL: \$140,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P G FORD	HQ/J T BERGSTRALH	32-Geological Sci

NAGW 3808 Massachusetts Institute of Technology 5029
AFRICAN CLIMATE AND VEGETATION STUDIES RELATED TO THE
HAPEX SAHEL

<i>Period</i>	<i>Obligations</i>	
12/13/1993-07/31/1994	FY94: \$31,477	TOTAL: \$31,477
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D ENTEKHABI	HQ/R E MURPHY	39-Env Sci, NEC
S N NICHOLSON	HQ/D E WICKLAND	

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAGW 3901 Massachusetts Institute of Technology 5030
SPECTROSCOPY OF NEW EARTH OBJECTS

Period	Obligations	
03/18/1994-12/31/1994	FY94: \$28,800	TOTAL: \$28,800
Prin. Invest.	NASA Tech. Officer	CASE Category
R BINZEL	HQ/J A RAHE	11-Astronomy

NAGW 3927 Massachusetts Institute of Technology 5031
NASA CENTER FOR QUANTITATIVE CARDIOVASCULAR PHYSIOLOGY

Period	Obligations	
04/12/1994-01/14/1995	FY94: \$308,506	TOTAL: \$308,506
Prin. Invest.	NASA Tech. Officer	CASE Category
R J COHEN	HQ/R J WHITE	59-Life Sci, NEC

NAGW 3936 Massachusetts Institute of Technology 5032
THEORETICAL STUDY OF SOLAR ACOUSTIC OSCILLATIONS

Period	Obligations	
04/11/1994-01/31/1996	FY94: \$85,000	TOTAL: \$85,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P KUMAR	HQ/W J WAGONER	13-Physics
	HQ/J D BOHLIN	

NAGW 3941 Massachusetts Institute of Technology 5033
DEVELOPMENT OF A LOW MASS LOW POWER HIGH VOLTAGE

Period	Obligations	
05/02/1994-12/31/1994	FY94: \$55,000	TOTAL: \$55,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A J LAZARUS	HQ/W V JONES	13-Physics
	HQ/J D BOHLIN	

NAGW 3958 Massachusetts Institute of Technology 5034
VISUAL VESTIBULAR INTERACTION

Period	Obligations	
05/10/1994-02/28/1995	FY94: \$330,000	TOTAL: \$330,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L R YOUNG	HQ/F M SULZMAN	56-Medical Sciences
C M OMAN		

NAS 1-18690 Massachusetts Institute of Technology 5035
MID-DECK 0-GRAVITY DYNAMICS EXPERIMENT

Period	Obligations	
12/06/1988-04/30/1996	FY94: \$371,000	TOTAL: \$5,198,904
Prin. Invest.	NASA Tech. Officer	CASE Category
E CROWLEY	LARC/L G CLARK	42-Astro Engr
	LARC/S M BECK	

NAS 1-19381 Massachusetts Institute of Technology 5036
OPTIMUM PASSIVE DAMPING FOR ACTIVE CONTROL OF SPACECRAFT STRUCTURES

Period	Obligations	
10/30/1991-04/30/1994	FY94: \$1,040	TOTAL: \$226,040
Prin. Invest.	NASA Tech. Officer	CASE Category
A H VON FLOTOW	LARC/R S TAYLOR	42-Astro Engr
N HAGOOD	LARC/J NEWCOM	

NAS 1-19622 Massachusetts Institute of Technology 5037
MIDDECK ACTIVE CONTROLS EXPERIMENT (MACE) PHASE C/D

Period	Obligations	
08/14/1992-02/14/1995	FY94: \$1,400,000	TOTAL: \$3,754,318
Prin. Invest.	NASA Tech. Officer	CASE Category
E CRAWLEY	LARC/G STOVER	41-Aero Engr
	LARC/J B MILLER	

NAS 5-30543 Massachusetts Institute of Technology 5038
VLBI SUPPORT TO CRUSTAL DYNAMICS PROJECT

Period	Obligations	
02/08/1989-02/07/1994	FY94: \$755,000	TOTAL: \$9,445,750
Prin. Invest.	NASA Tech. Officer	CASE Category
A E ROGERS	GSFC/W T WILDES	32-Geological Sci
A E NIELL		

NAS 5-30550 Massachusetts Institute of Technology 5039
FARADAY CUP SENSORS AND MEASUREMENT CHAIN FOR WIND

Period	Obligations	
03/15/1989-12/01/1994	FY94: \$74,000	TOTAL: \$2,211,996
Prin. Invest.	NASA Tech. Officer	CASE Category
J LAZARUS	GSFC/K OGALVIE	42-Astro Engr

NAS 5-30612 Massachusetts Institute of Technology 5040
ALL SKY MONITOR INSTRUMENTS

Period	Obligations	
12/15/1989-09/30/1997	FY94: \$3,720,000	TOTAL: \$19,824,328
Prin. Invest.	NASA Tech. Officer	CASE Category
H BRADT	GSFC/W DAVIS	11-Astronomy

NAS 5-31376 Massachusetts Institute of Technology 5041
RECURSIVE ESTIMATION OF GEOGRAPHICAL PRODUCTS WITH AIRS/AMSU DATA (EOS INVESTIGATION)

Period	Obligations	
01/10/1992-12/14/2001	FY94: \$192,000	TOTAL: \$504,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D H STAELIN	GSFC/E KREINS	32-Geological Sci
P W ROSENKRANZ		

NAS 5-31721 Massachusetts Institute of Technology 5042
EOS INVESTIGATION 'GLOBAL HYDROLOGIC PROCESSES CLIMATE'

Period	Obligations	
09/19/1991-09/18/1996	FY94: \$120,000	TOTAL: \$408,250
Prin. Invest.	NASA Tech. Officer	CASE Category
P EAGLESON	GSFC/W LAU	39-Env Sci, NEC

NAS 5-31728 Massachusetts Institute of Technology 5043
ACQUISITION OF VLBI CORRELATOR

Period	Obligations	
03/19/1992-03/19/1995	FY94: \$1,055,169	TOTAL: \$2,154,684
Prin. Invest.	NASA Tech. Officer	CASE Category
A R WHITNEY	GSFC/B WILDES	32-Geological Sci

NAS 5-32353 Massachusetts Institute of Technology 5044
MARK III VLBI SUPPORT

Period	Obligations	
02/08/1994-02/07/1999	FY94: \$977,100	TOTAL: \$977,100
Prin. Invest.	NASA Tech. Officer	CASE Category
A NEILL	GSFC/W WILDES	32-Geological Sci

NAS 5-33017 Massachusetts Institute of Technology 5045
GLRS SCIENCE TEAM MEMBER STUDY

Period	Obligations	
09/01/1989-12/31/1994	FY94: \$100,000	TOTAL: \$193,000
Prin. Invest.	NASA Tech. Officer	CASE Category
T HERRING	GSFC/G SOFFEN	39-Env Sci, NEC

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAS 5-33020 Massachusetts Institute of Technology 5046
GLIS SCIENCE TEAM MEMBER STUDY

<i>Period</i>	<i>Obligations</i>	
09/01/1989-12/31/1993	FY94: \$10,000	TOTAL: \$93,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R REILINGER	GSFC/G SOFFEN	39-Env Sci, NEC

NAS 8-37716 Massachusetts Institute of Technology 5047
CONDUCT AN X-RAY IMAGING SPECTROSCOPY SCIENTIFIC INVESTIGATION

<i>Period</i>	<i>Obligations</i>	
07/23/1990-10/30/1997	FY94: \$9,523,000	TOTAL: \$21,481,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G RICKER	MSFC/N B CUMINGS	11-Astronomy

NAS 8-38249 Massachusetts Institute of Technology 5048
AXAF (HETGS)

<i>Period</i>	<i>Obligations</i>	
07/13/1990-11/30/1999	FY94: \$4,432,000	TOTAL: \$12,690,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C R CANIZARES	MSFC/C E WINKLER	11-Astronomy

NAS 9-16523 Massachusetts Institute of Technology 5049
INS 102/VESTIBULAR EXPER/SPACELAB

<i>Period</i>	<i>Obligations</i>	
01/01/1982-12/31/1994	FY94: \$600,000	TOTAL: \$6,643,367
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L R YOUNG	JSC/M BUNTIN	59-Life Sci, NEC

NAS 9-18372 Massachusetts Institute of Technology 5050
PLASMA GAS INTERACTION STUDY

<i>Period</i>	<i>Obligations</i>	
08/08/1990-04/30/1993	FY94: \$0	TOTAL: \$90,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T F YANG	JSC/F R CHANG-DIAZ	13-Physics

NAS 9-18734 Massachusetts Institute of Technology 5051
SPACELAB LIFE SCI MISSION SUPPORT

<i>Period</i>	<i>Obligations</i>	
08/28/1992-11/30/1993	FY94: \$18,424	TOTAL: \$358,259
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L R YOUNG	JSC/K NEWKIRK	59-Life Sci, NEC

NASW 4372 Massachusetts Institute of Technology 5052
JAPANESE ASTRO-D X-RAY ASTRONOMY MISSION

<i>Period</i>	<i>Obligations</i>	
12/30/1988-08/31/1994	FY94: \$321,421	TOTAL: \$5,968,950
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G R RICKER	HQ/J LINTOTT	11-Astronomy
	GSFC/G OUSLEY	

NASW 4690 Massachusetts Institute of Technology 5053
HIGH ENERGY TRANSIENT EXPERIMENT TO DETERMINE ORIG IN AND NATURE OF GAMMA-RAY BURSTS

<i>Period</i>	<i>Obligations</i>	
03/30/1992-09/30/1995	FY94: \$2,922,000	TOTAL: \$11,624,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G RICKER	HQ/D GILMAN	13-Physics
	HQ/L KALUZIENSKI	

NASW 4870 Massachusetts Institute of Technology 5054
BASIC RESEARCH ON CONTROL OF FLEXIBLE SYSTEMS

<i>Period</i>	<i>Obligations</i>	
06/15/1994-03/14/1995	FY94: \$132,689	TOTAL: \$132,689
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W SEERING	HQ/A B DOUGHERTY	46-Mech Engr

NASW 4886 Massachusetts Institute of Technology 5055
IN-STEP PROGRAM PHASE A AWARD

<i>Period</i>	<i>Obligations</i>	
05/12/1994-02/12/1995	FY94: \$120,000	TOTAL: \$120,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E F CRAWLEY	HQ/J LANDERS	99-Multi-Discip

NCC 1-157 Massachusetts Institute of Technology 5056
AEROELASTIC CONTROL USING STRAIN ACTUATED ADAPTIVE STRUCTURES

<i>Period</i>	<i>Obligations</i>	
08/05/1991-07/17/1994	FY94: \$83,000	TOTAL: \$466,600
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E F CRAWLEY	LARC/J HEEG	41-Aero Engr

NCC 2-570 Massachusetts Institute of Technology 5057
PRINCIPAL INVESTIGATOR IN A BOX

<i>Period</i>	<i>Obligations</i>	
12/29/1988-09/30/1994	FY94: \$200,000	TOTAL: \$1,602,190
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L R YOUNG	ARC/P E FRIEDLAND	22-Computer Science
	ARC/D A ROSENTHAL	

NCC 2-771 Massachusetts Institute of Technology 5058
INERTIAL HEAD TRACKER FOR USE IN SUPER AUDITORY LOCALIZATION EXPERIMENTS

<i>Period</i>	<i>Obligations</i>	
10/14/1992-08/31/1995	FY94: \$73,000	TOTAL: \$190,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N I PURLACH	ARC/E M WENZEL	69-Psych, NEC
	ARC/C N NULL	

NCC 2-4001 Massachusetts Institute of Technology 5059
ALGORITHMS FOR IN-FLIGHT MODIFICATION ALGORITHMS FOR IN-FLIGHT MODIFICATION

<i>Period</i>	<i>Obligations</i>	
12/16/1993-11/15/1994	FY94: \$68,858	TOTAL: \$68,858
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J D PADUANO	ARC/J BURKEN	41-Aero Engr

NCC 2-5018 Massachusetts Institute of Technology 5060
RESEARCH IN SUPPORT OF INCREASED HELICOPTER MANUEVERABILITY AND AGILITY

<i>Period</i>	<i>Obligations</i>	
11/30/1993-12/31/1994	FY94: \$9,999	TOTAL: \$9,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N D HAM	ARC/R T CHEN	41-Aero Engr

NCC 3-256 Massachusetts Institute of Technology 5061
VISUAL 3 ENHANCEMENTS

<i>Period</i>	<i>Obligations</i>	
03/17/1992-10/18/1994	FY94: \$0	TOTAL: \$128,997
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R HAILES	LERC/G J FOLLEN	29-Math/Computer, NEC

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NCC 3-265 Massachusetts Institute of Technology 5062
MIT ENGINEERING INTERNSHIP PROGRAM
Period *Obligations*
05/20/1992-05/31/1995 FY94: \$49,836 TOTAL: \$154,602
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L KERREBROCK LERC/S A APP 41-Aero Engr

NCC 3-307 Massachusetts Institute of Technology 5063
LOBED MIXER EXPERIMENTS IN REACTING FLOWS
Period *Obligations*
05/05/1993-01/09/1995 FY94: \$100,205 TOTAL: \$153,860
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I A WAITZ LERC/C J MAREK 41-Aero Engr

NGL22-9640 Massachusetts Institute of Technology 5064
JOINT UNIVERSITY RESEARCH PROGRAM FOR AIR
TRANSPORTATION NEEDS \$94,000
Period *Obligations*
11/16/1971-01/31/1995 FY94: \$130,001 TOTAL: \$1,885,990
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W SIMPSON LARC/F R MORRELL 41-Aero Engr

NGR22-9727 Massachusetts Institute of Technology 5065
STUDY IN NUMERICAL MODELLING OF ATMOSPHERIC
PHENOMENA
Period *Obligations*
02/01/1973-12/31/1993 FY94: \$0 TOTAL: \$2,671,920
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P H STONE GSFC/C DUFFY 31-Atmos Sci

NGT 00-010-010 Massachusetts Institute of Technology 5066
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP P
ROGRAM
Period *Obligations*
10/18/1993-03/31/1994 FY94: \$49,739 TOTAL: \$49,739
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E M MURMAN HQ/G S SEIDEL 41-Aero Engr
HQ/J R FACEY

NGT 00-030-036 Massachusetts Institute of Technology 5067
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
02/07/1991-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ZHANG HQ/G ASRAR 31-Atmos Sci

NGT 00-030-086 Massachusetts Institute of Technology 5068
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/12/1991-08/31/1993 FY94: \$0 TOTAL: \$30,311
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E A ELTAHIR HQ/D M BUTLER 39-Env Sci, NEC
R L BRAS HQ/G S WILSON

NGT 00-030-109 Massachusetts Institute of Technology 5069
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/22/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N M MAHOWALD HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-030-151 Massachusetts Institute of Technology 5070
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/22/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A M MACDONALD HQ/G ASRAR 39-Env Sci, NEC
HQ/R A SCHIFFER

NGT 00-040-001 Massachusetts Institute of Technology 5071
NATIONAL SPACE GRANT COLLEGE
Period *Obligations*
10/10/1989-01/31/1995 FY94: \$380,000 TOTAL: \$1,795,903
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L R YOUNGNGS HQ/E T, SCHWARTZ 99-Multi-Discip

NGT 00-050-669 Massachusetts Institute of Technology 5072
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/11/1990-02/28/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L ELLIOT HQ/F C OWENS 11-Astronomy

NGT 00-050-720 Massachusetts Institute of Technology 5073
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/10/1991-06/30/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S MEYER HQ/F C OWENS 13-Physics

NGT 00-050-835 Massachusetts Institute of Technology 5074
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/19/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A BROOKS HQ/F C OWENS 22-Computer Science

NGT 00-050-843 Massachusetts Institute of Technology 5075
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/20/1991-06/30/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D LANNING HQ/F C OWENS 49-Engr, NEC

NGT 00-050-908 Massachusetts Institute of Technology 5076
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/29/1992-06/30/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S MEYER HQ/J ALEXANDER 13-Physics

NGT 00-050-925 Massachusetts Institute of Technology 5077
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/15/1992-12/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D ENTEKHABI GSFC/G SOFFEN 44-Civil Engr

NGT 00-050-940 Massachusetts Institute of Technology 5078
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/29/1992-12/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G WALL, ARC/M MOORE 42-Astro Engr

NASA'S UNIVERSITY PROGRAM **MASSACHUSETTS (Continued)**

NGT 00-051-069 Massachusetts Institute of Technology 5079

GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
05/19/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J SZEKELY	HQ/B CARPENTER	47-Materials Engr

NGT 00-051-136 Massachusetts Institute of Technology 5080

GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
06/22/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P CEBE	HQ/D A HOLLAND	47-Materials Engr

NGT 00-051-158 Massachusetts Institute of Technology 5081

GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
07/23/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D ENTEKHABI	HQ/G LESANE	44-Civil Engr

NGT 00-051-228 Massachusetts Institute of Technology 5082

GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
05/25/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D J NEWMAN	JSC/S GOLDSTEIN	41-Aero Engr

NGT 00-051-330 Massachusetts Institute of Technology 5083

GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
07/26/1994-08/31/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L MCKNIGHT	HQ/D HOLLAND	22-Computer Science

NGT 00-051-369 Massachusetts Institute of Technology 5084

GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/06/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W H LEWIN	MSFC/F SIX	13-Physics

NGT 00-090-149 Massachusetts Institute of Technology 5085

UNDERGRADUATE STUDENT RESEARCH PROGRAM/UMF

<i>Period</i>	<i>Obligations</i>	
11/13/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J JACKSON	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-208 Massachusetts Institute of Technology 5086

UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/16/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J JACKSON	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-209 Massachusetts Institute of Technology 5087

UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/16/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J JACKSON	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-210 Massachusetts Institute of Technology 5088

UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/16/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J JACKSON	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-211 Massachusetts Institute of Technology 5089

UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/14/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J JACKSON	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-212 Massachusetts Institute of Technology 5090

UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/16/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J JACKSON	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-213 Massachusetts Institute of Technology 5091

UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/16/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J JACKSON	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-231 Massachusetts Institute of Technology 5092

UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/16/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J JACKSON	HQ/D K RUSSELL	99-Multi-Discip

NAGW 1792

Mt Holyoke College

5093

SUMMER MATH PROGRAM FOR MINORITY GIRLS

<i>Period</i>	<i>Obligations</i>	
06/30/1989-11/30/1994	FY94: \$115,837	TOTAL: \$418,634
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J MORROW	HQ/B L WHITE	29-Math/Computer, NEC
C MORROW	HQ/L WARREN	

NAG 3-1129

Northeastern University

5094

ANALYSIS AND NDE OF ADHESIVELY BONDED COMPOSITE JOINTS

<i>Period</i>	<i>Obligations</i>	
01/22/1990-02/17/1995	FY94: \$22,181	TOTAL: \$97,880
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H N HASEMI	LERC/A VARY	47-Materials Engr
J N ROSSETTOS	LERC/H E KAUTZ	

NGT 00-050-608

Northeastern University

5095

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
07/06/1990-06/15/1993	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M MATALON	HQ/F C OWENS	21-Mathematics

NGT 00-050-627

Northeastern University

5096

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
07/24/1990-06/30/1993	FY94: \$0	TOTAL: \$63,743
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P W VOORHEES	HQ/F C OWENS	47-Materials Engr

NASA'S UNIVERSITY PROGRAM MASSACHUSETTS (Continued)

NAG 1-1523 Tufts University 5097
INTERFACING THE IFA 750 WITH LABVIEW NLPN 93-519
Period Obligations
06/28/1993-09/30/1993 FY94: \$0 TOTAL: \$8,164
Prin. Invest. NASA Tech. Officer CASE Category
C ROGERS LARC/M J WALSH 41-Aero Engr

NAGW 2383 Tufts University 5098
OBSERVATIONS OF SOLAR ACTIVITY AT RADIO WAVELENGTH S
IN SUPPORT OF NASA BALLOON AND SATELLITE MISSIO
Period Obligations
03/18/1991-10/31/1994 FY94: \$25,000 TOTAL: \$421,788
Prin. Invest. NASA Tech. Officer CASE Category
K LANG HQ/W J WAGNER 13-Physics
HQ/K LANG

NAGW 3577 Tufts University 5099
IMAGE RESTORATION AND FUNDAMENTAL LIMITATIONS OF H ST
WF/PC IMAGERY
Period Obligations
05/05/1993-12/31/1993 FY94: \$0 TOTAL: \$45,000
Prin. Invest. NASA Tech. Officer CASE Category
R A GONSALES HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NGT 00-050-943 Tufts University 5100
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/14/1992-08/31/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
A SAIGAL LERC/F MONTEGANI 46-Mech Engr

NAG 1-1261 University of Massachusetts 5101
CALCULATIONS OF LINE WIDTHS AND LINE SHIFTS FOR CH4
PERTURBED BY CH4 N2 AND O2
Period Obligations
04/12/1991-09/30/1994 FY94: \$20,000 TOTAL: \$211,093
Prin. Invest. NASA Tech. Officer CASE Category
R R GAMACHE LARC/J G WELLS 31-Atmos Sci
LARC/J M RUSSELL

NAG 8-1055 University of Massachusetts 5102
STRUMENT DEFINITION OF A RADIO SOUNDER FOR GLOBAL
MAGNETOSPHERIC IMAGING
Period Obligations
03/23/1994-02/01/1995 FY94: \$110,953 TOTAL: \$110,953
Prin. Invest. NASA Tech. Officer CASE Category
B W REINISCH MSFC/C L JOHNSON 41-Aero Engr

NCC 2-5029 University of Massachusetts 5103
THEORETICAL CALCULATIONS OF PRESSURE BROADENING CO
EFFICIENTS FOR H2O PERTURBED BY HYDROGEN OR HELIU
Period Obligations
02/03/1994-01/31/1995 FY94: \$20,882 TOTAL: \$20,882
Prin. Invest. NASA Tech. Officer CASE Category
R R GAMACHE ARC/J B POLLACK 13-Physics

NGT 00-051-217 University of Massachusetts 5104
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/19/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
G G GRINSTEIN SSC/A JOYCE 22-Computer Science

NAG 1-1022 University of Massachusetts - Amherst 5105
GROUND-BASED MILLIMETER-WAVE MEASUREMENT OF OZONE IN
THE MIDDLE ATMOSPHERE
Period Obligations
06/19/1989-03/31/1995 FY94: \$84,999 TOTAL: \$533,121
Prin. Invest. NASA Tech. Officer CASE Category
A D PARRISH LARC/B J CONNOR 31-Atmos Sci

NAG 3-1458 University of Massachusetts - Amherst 5106
MODEL-BASED FAULT DIAGNOSIS OF HELICOPTER GEARBOX S
Period Obligations
04/01/1993-04/17/1995 FY94: \$60,593 TOTAL: \$120,527
Prin. Invest. NASA Tech. Officer CASE Category
K DANAI LERC/D G LEWICKI 46-Mech Engr
LERC/J J ZAKRAJSEK

NAG 5-1288 University of Massachusetts - Amherst 5107
INFRARED EMISSION ASSOCIATED WITH MOLECULA CLOUDS
Period Obligations
08/31/1989-09/30/1993 FY94: \$0 TOTAL: \$96,219
Prin. Invest. NASA Tech. Officer CASE Category
R L SNELL GSFC/D WEST 11-Astronomy

NAG 5-1999 University of Massachusetts - Amherst 5108
DETERMINING THE LARGE SCALE STRUCTURE OF THE GALAX Y
Period Obligations
07/01/1992-06/30/1994 FY94: \$0 TOTAL: \$70,900
Prin. Invest. NASA Tech. Officer CASE Category
M WEINBERG GSFC/D WEST 11-Astronomy

NAG 5-2000 University of Massachusetts - Amherst 5109
CLUMPINESS AND SHOCK EFFECTS IN MON R2 CLOUD
Period Obligations
07/01/1992-06/30/1994 FY94: \$0 TOTAL: \$11,752
Prin. Invest. NASA Tech. Officer CASE Category
P F GOLDSMITH GSFC/D WEST 11-Astronomy

NAG 5-2713 University of Massachusetts - Amherst 5110
IRAS (HIRES) STUDIES OF HIGH MASS STAR FORMATION
Period Obligations
08/31/1994-09/14/1995 FY94: \$6,000 TOTAL: \$6,000
Prin. Invest. NASA Tech. Officer CASE Category
E F LADD GSFC/D WEST 11-Astronomy

NAGW 436 University of Massachusetts - Amherst 5111
BOUNDARY CONDITIONS FOR THE PALEOENVIRONMENT: CHEMICAL
AND PHYSICAL PROCESSES IN THE PRE-SOLAR NEBUL
Period Obligations
02/15/1983-10/14/1993 FY94: \$72,081 TOTAL: \$633,154
Prin. Invest. NASA Tech. Officer CASE Category
W M IRVINE HQ/J D RUMMEL 32-Geological Sci
F P SCHLOERB HQ/M AVERNER

NAGW 559 University of Massachusetts - Amherst 5112
ALGORITHM DEVELOPMENT TO MEASURE SEA ICE FRACTION WITH
MICROWAVE RADIOMETERS
Period Obligations
12/01/1983-09/30/1993 FY94: \$0 TOTAL: \$1,276,872
Prin. Invest. NASA Tech. Officer CASE Category
C T SWIFT HQ/R H THOMAS 33-Oceanography
HQ/W S WILSON

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NAGW 1112 University of Massachusetts - Amherst 5113
MICROWAVE REMOTE SENSING OF OCEANIC PROCESSES

Period	Obligations	
06/01/1987-11/30/1994	FY94: \$124,934	TOTAL: \$1,337,998
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R E MCINTOSH	HQ/G S LAGERLOEF	33-Oceanography
	HQ/W S WILSON	

NAGW 1417 University of Massachusetts - Amherst 5114
THE EVOLUTION OF YOUNG STELLAR OBJECT DISKS THEIR ENVIRONMENT

Period	Obligations	
09/22/1988-04/30/1995	FY94: \$30,000	TOTAL: \$201,486
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S E STROM	HQ/J H RAHE	11-Astronomy

NAGW 1483 University of Massachusetts - Amherst 5115
STUDIES IN RADIATIVE TRANSFER

Period	Obligations	
11/02/1988-12/31/1993	FY94: \$66,063	TOTAL: \$400,051
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F P SCHLOERB	HQ/J H RAHE	11-Astronomy

NAGW 1935 University of Massachusetts - Amherst 5116
STUDY PHASE FOR A NEW 2 MICRON SKY SURVEY

Period	Obligations	
02/06/1990-06/30/1995	FY94: \$933,517	TOTAL: \$1,786,348
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S G KLEINMANN	HQ/G S LEVY	11-Astronomy

NAGW 1965 University of Massachusetts - Amherst 5117
NAGW-1965/UNIV OF MASSACHUSETTS/PLANETARY TECTONIC S, AREAL GEOLOGY, AND GEOLOGICAL HISTORY

Period	Obligations	
01/24/1990-01/31/1995	FY94: \$35,036	TOTAL: \$204,228
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G E MCGILL	HQ/T A MAXWELL	32-Geological Sci

NAGW 1989 University of Massachusetts - Amherst 5118
MICROBIAL CONTRIBUTIONS TO THE PRECAMBRIAN EARTH

Period	Obligations	
04/27/1990-12/31/1994	FY94: \$80,000	TOTAL: \$439,401
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L MARGOLIS	HQ/J D RUMMELT	51-Biological Sci

NAGW 2223 University of Massachusetts - Amherst 5119
SOURCES AND AGES OF MARTIAN POLYGONAL TERRAIN MATERIALS

Period	Obligations	
02/22/1991-10/31/1994	FY94: \$0	TOTAL: \$64,235
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G E MCGILL	HQ/T A MAXWELL	32-Geological Sci

NAGW 2430 University of Massachusetts - Amherst 5120
DEVELOPMENT OF A 1036 HETERODYNE RECEIVER FOR ASTRONOMICAL APPLICATIONS

Period	Obligations	
07/31/1991-03/31/1994	FY94: \$0	TOTAL: \$150,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N ERICKSON	HQ/M BEICAY	13-Physics

NAGW 3532 University of Massachusetts - Amherst 5121
STRUCTURAL EVOLUTION OF VENUSIAN PLAINS

Period	Obligations	
04/22/1993-02/28/1995	FY94: \$57,600	TOTAL: \$134,664
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G E MCGILL	HQ/J T BERGSTRALH	32-Geological Sci

NAGW 3685 University of Massachusetts - Amherst 5122
RADAR ALTIMETRY STUDIES OVER THE GREENLAND ICE SHEET: EXPERIMENT AND ANALYSIS

Period	Obligations	
07/16/1993-05/31/1996	FY94: \$0	TOTAL: \$85,151
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C T SWIFT	HQ/R H THOMAS	31-Atmos Sci

NAGW 3809 University of Massachusetts - Amherst 5123
THE RADIAL DISTRIBUTION OF INFRARED LUMINOSITY IN LARGE SPIRAL GALAXIES

Period	Obligations	
12/17/1993-08/31/1994	FY94: \$26,627	TOTAL: \$26,627
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J YOUNG	HQ/G R RIEGLER	11-Astronomy

NAGW 10-91 University of Massachusetts - Amherst 5124
MONITORING ETHYLENE AND AMMONIA GAS EMISSIONS FROM PLANTS CULTURED FOR A CELSS

Period	Obligations	
08/19/1991-03/28/1995	FY94: \$30,000	TOTAL: \$124,896
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K A COREY	KSC/W M KNOTT	43-Chem Engr

NAS 5-31757 University of Massachusetts - Amherst 5125
DEVELOPMENT OF SYNTHETIC APERTURE RADIOMETER

Period	Obligations	
12/16/1992-02/07/1995	FY94: \$100,613	TOTAL: \$225,613
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C SWIFT	GSFC/D LEVINE	46-Mech Engr

NGT 00-030-101 University of Massachusetts - Amherst 5126
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
11/16/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A W PAYLOR	HQ/G ASRAR	99-Multi-Discip
	HQ/J S THEON	

NGT 00-030-149 University of Massachusetts - Amherst 5127
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/30/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J D ISHAM	HQ/G ASRAR	39-Env Sci, NEC
	HQ/D M BUTLER	

NGT 00-050-606 University of Massachusetts - Amherst 5128
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/07/1990-06/30/1993	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C T SWITT	HQ/F C OWENS	45-Elec Engr

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NGT 00-050-772 University of Massachusetts - Amherst 5129
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/16/1991-06/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E MCINTOSH HQ/F C OWENS 45-Elec Engr

NGT 00-050-828 University of Massachusetts - Amherst 5130
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/25/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K M LAU HQ/F C OWENS 45-Elec Engr

NGT 00-051-277 University of Massachusetts - Amherst 5131
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E MCINTOSH JPL/C HIX 45-Elec Engr

NGT 00-051-282 University of Massachusetts - Amherst 5132
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K A COREY HQ/G LESANE 55-Agriculture Sci

NGT 00-070-234 University of Massachusetts - Amherst 5133
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
06/05/1991-06/30/1994 FY94: \$0 TOTAL: \$88,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K M LAU HQ/F C OWENS 45-Elec Engr

NGT 00-070-358 University of Massachusetts - Amherst 5134
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
08/31/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P COHEN HQ/D K RUSSELL 22-Computer Science

NAG 2-814 Wellesley College 5135
EARTH-BASED RING OCCULTATION
Period *Obligations*
12/01/1992-06/30/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G FRENCH ARC/J N CUZZI 11-Astronomy

NAGW 1368 Wellesley College 5136
DYNAMICS AND STRUCTURE OF PLANETARY RINGS
Period *Obligations*
07/11/1988-09/30/1994 FY94: \$48,800 TOTAL: \$277,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G FRENCH HQ/J M UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 2511 Wellesley College 5137
OCCULTATION STUDIES OF NEPTUNE'S RINGS AND ATMOSPHERE
Period *Obligations*
05/07/1991-06/30/1995 FY94: \$0 TOTAL: \$99,721
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P G FRENCH HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 3607 Wellesley College 5138
ANALYSIS OF VOYAGER OCCULTATION MEASUREMENTS OF THE ATMOSPHERES OF TITAN AND TRITON
Period *Obligations*
05/21/1993-12/31/1993 FY94: \$0 TOTAL: \$34,866
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G STARK HQ/J T BERGSTRALH 19-Phys Sci, NEC

NAG 5-1888 Williams College 5139
DIFFUSE SOFT X-RAY EMISSION FROM THE DUMBBELL NEBULA NGC 6853
Period *Obligations*
01/27/1992-08/31/1993 FY94: \$0 TOTAL: \$15,338
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K B KWITTER GSFC/R PETRE 11-Astronomy

NAGW 3266 Williams College 5140
NAGW-3266/WILLIAMS COLLEGE/INTERACTIVE AND OTHER AXAF MATERIALS PREPARATION
Period *Obligations*
11/09/1992-07/31/1993 FY94: \$0 TOTAL: \$5,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J PASACHOFF HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 1666 Woods Hole Oceanographic Institution 5141
GULF STREAM UPPER OCEAN STUDIES
Period *Obligations*
02/23/1989-12/31/1994 FY94: \$70,000 TOTAL: \$536,544
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K A KELLY HQ/G S LAGERLOEF 33-Oceanography
T M JOYCE HQ/W S WILSON

NAGW 2431 Woods Hole Oceanographic Institution 5142
BIOGEOCHEMICAL FLUXES AT THE OCEAN/ATMOSPHERE INTERFACE
Period *Obligations*
04/25/1991-12/31/1993 FY94: \$838,000 TOTAL: \$3,306,800
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P G BREWER HQ/B MITCHELL 33-Oceanography

NAGW 2783 Woods Hole Oceanographic Institution 5143
GAS EXCHANGE IN WETLANDS; CONTROLS AND REMOTE SENSING
Period *Obligations*
12/02/1991-03/31/1993 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J W DACEY HQ/M M AVERNER 39-Env Sci, NEC

NAGW 3648 Woods Hole Oceanographic Institution 5144
A COUPLED BIOLOGICAL-PHYSICAL MODEL FOR STUDYING ANNUAL AND INTER-ANNUAL VARIABILITY IN SEAWIFS
Period *Obligations*
07/14/1993-12/31/1996 FY94: \$100,000 TOTAL: \$124,765
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M GLOVER HQ/R MURPHY 33-Oceanography

**NASA'S UNIVERSITY PROGRAM
MASSACHUSETTS (Continued)**

NGT 00-030-006 Woods Hole Oceanographic Institution 5145
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/02/1990-08/31/1993 FY94: TOTAL: \$65,543
Prin. Invest. NASA Tech. Officer CASE Category
H L BRYDEN HQ/G ASRAR 33-Oceanography

NGT 00-030-096 Woods Hole Oceanographic Institution 5146
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/21/1990-08/31/1993 FY94: TOTAL: \$21,309
Prin. Invest. NASA Tech. Officer CASE Category
C MAURITZEN HQ/G ASRAR 33-Oceanography
C WUNSCH HQ/D M BUTLER

NAG 1-1476 Worcester Polytechnic Institute 5147
ENGINEERING DESIGN OF SUB-MICRON TOPOGRAPHICS FOR
SIMULTANEOUSLY ADHERENT AND REFLECTIVE METAL-POLY
Period Obligations
01/15/1993-01/12/1994 FY94: \$1 TOTAL: \$20,001
Prin. Invest. NASA Tech. Officer CASE Category
C A BROWN LARC/D M STOAKLEY 46-Mech Engr
LARC/A K ST. CLAIR

NAG 1-1606 Worcester Polytechnic Institute 5148
ANALYSIS OF RUNWAY SURFACE TOPOGRAPHIES FOR
CONCURRENT ENGINEERING DESIGN
Period Obligations
02/22/1994-02/21/1995 FY94: \$77,000 TOTAL: \$77,000
Prin. Invest. NASA Tech. Officer CASE Category
C A BROWN LARC/J A TANNER 46-Mech Engr

NAG 5-1138 Worcester Polytechnic Institute 5149
STUDY OF A 2-DIMENSIONAL FAST FOURIER TRANSFORM
MACHINE
Period Obligations
06/01/1989-08/31/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
F U BORIAKOFF GSFC/G CHIN 22-Computer Science
GSFC/J FLOREZ

NAGW 2234 Worcester Polytechnic Institute 5150
NAGW-2234/WORCESTER POLYTECHNIC INST./NITRATES,
PHOTOLYTIC PROCESSES AND THE PH AT THE MARTIAN
Period Obligations
03/11/1991-09/30/1993 FY94: \$0 TOTAL: \$90,270
Prin. Invest. NASA Tech. Officer CASE Category
R C PLUMB HQ/J M BOYCE 32-Geological Sci

NAS 8-40222 Worcester Polytechnic Institute 5151
USML 2 PAYLOAD SPECIALIST
Period Obligations
07/06/1994-03/21/1996 FY94: \$175,000 TOTAL: \$175,000
Prin. Invest. NASA Tech. Officer CASE Category
A SACCO MSFC/P GILBERT 19-Phys Sci, NEC

NCC 3-312 Worcester Polytechnic Institute 5152
DESIGN AND DEVELOPMENT OF EXPERIMENTAL FACILITIES FO R
SHORT DURATION, LOW GRAVITY COMB AND FIRE EXPR
Period Obligations
05/28/1993-09/09/1993 FY94: \$0 TOTAL: \$11,794
Prin. Invest. NASA Tech. Officer CASE Category
V MOTEVALLI LERC/H D ROSS 46-Mech Engr

NGT 00-050-773 Worcester Polytechnic Institute 5153
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/25/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A ALEXANDROU HQ/F C OWENS 46-Mech Engr

NGT 00-050-827 Worcester Polytechnic Institute 5154
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R D SISSON HQ/F C OWENS 47-Materials Engr

NGT 00-051-107 Worcester Polytechnic Institute 5155
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/28/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
C A BROWN LARC/E PRIOR 46-Mech Engr

MICHIGAN

NAG 8-999 Alma College 5156
JOVE
Period Obligations
11/01/1993-05/31/1995 FY94: \$31,000 TOTAL: \$31,000
Prin. Invest. NASA Tech. Officer CASE Category
J E DAVIS MSFC/F SIX 19-Phys Sci, NEC
STRAIT

NAGW 3208 Delta College 5157
NAGW-3208/DELTA COLLEGE/DELTA COLLEGE SCIENCE LEARNING
CENTER
Period Obligations
09/17/1992-05/14/1995 FY94: \$1,175,000 TOTAL: \$1,925,000
Prin. Invest. NASA Tech. Officer CASE Category
H ARMAN HQ/M PHELPS 99-Multi-Discip

NAGW 3073 Eastern Michigan University 5158
TEACHER TRAINING PRE-SERVICE PILOT PROGRAM
Period Obligations
05/29/1992-08/31/1994 FY94: \$0 TOTAL: \$82,408
Prin. Invest. NASA Tech. Officer CASE Category
J BARNES HQ/D GALLAWAY 99-Multi-Discip

NAG 8-226 Grand Valley State University 5159
JOVE
Period Obligations
02/25/1992-08/24/1995 FY94: \$20,000 TOTAL: \$136,782
Prin. Invest. NASA Tech. Officer CASE Category
W A CHREN MSFC/F SIX 59-Life Sci, NEC
K C COLE
R A REYNOLDS

NAGW 3006 Grand Valley State University 5160
EFFECT OF GLACIAL AND POLAR ICE ON SPACE GEODETIC
OBSERVATIONS
Period Obligations
03/20/1992-12/31/1993 FY94: TOTAL: \$55,731
Prin. Invest. NASA Tech. Officer CASE Category
A S TROPIN HQ/R E MURPHY 32-Geological Sci
HQ/D M BUTLER

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NAG 1-1480 Hope College 5161
 BUILDING A SOFTWARE INFRASTRUCTURE FOR PARALLEL
 SOFTWARE DESIGN NLPN 92-910
Period Obligations
 02/23/1993-02/22/1995 FY94: \$25,975 TOTAL: \$50,959
Prin. Invest. NASA Tech. Officer CASE Category
 M J JIPPING LARC/D E ECKHARDT 22-Computer Science

NAG 8-263 Hope College 5162
 JOVE
Period Obligations
 11/09/1992-09/01/1996 FY94: \$40,318 TOTAL: \$84,338
Prin. Invest. NASA Tech. Officer CASE Category
 P L GONTHIER MSFC/F SIX 13-Physics
 M J JIPPING

NAG 1-1106 Michigan State University 5163
 LIPA MEASUREMENTS OF HIGH REYNOLDS NUMBER CYLINDER
 FLOW
Period Obligations
 03/02/1990-09/30/1993 FY94: \$1 TOTAL: \$70,002
Prin. Invest. NASA Tech. Officer CASE Category
 R E FALCO LARC/L M WEINSTEIN 41-Aero Engr
 C GENDRICH LARC/J B ANDERS

NAG 1-1591 Michigan State University 5164
 A DISCRETE-LAYER FINITE ELEMENT MODEL FOR STATIC A ND
 DYNAMIC PROGRESSIVE FAILURE ANALYSIS OF LARGE
Period Obligations
 01/31/1994-01/27/1996 FY94: \$33,769 TOTAL: \$33,769
Prin. Invest. NASA Tech. Officer CASE Category
 R C AVERILL LARC/A TESSLER 46-Mech Engr

NAG 3-1271 Michigan State University 5165
 AN EXPERIMENTAL THEORETICAL STUDY OF RADIATIVE EXT
 INCTION OF DIFFUSION FLAMES
Period Obligations
 04/15/1991-03/25/1995 FY94: \$45,000 TOTAL: \$230,000
Prin. Invest. NASA Tech. Officer CASE Category
 A ATREYA LERC/K R SACKSTEDER 49-Engr, NEC
 I S WICHMAN

NAG 3-1304 Michigan State University 5166
 INVESTIGATION ON THE USE OF DIGITAL SIGNAL PROCESS ING
 FOR PHASE STEPPING INTERFEROMETRY
Period Obligations
 11/05/1991-03/17/1995 FY94: \$33,000 TOTAL: \$104,595
Prin. Invest. NASA Tech. Officer CASE Category
 H J SCHOCK LERC/C R MERCER 45-Elec Engr
 LERC/D J LESCO

NAG 3-1459 Michigan State University 5167
 TIME RESOLVED MEASUREMENTS OF THE STREAMWISE VORTI
 CITY IN THE MIXING LAYER FROM A TABBED NOZZLE
Period Obligations
 02/22/1993-03/14/1995 FY94: \$39,144 TOTAL: \$75,047
Prin. Invest. NASA Tech. Officer CASE Category
 J F FOSS LERC/K Q ZAMAN 46-Mech Engr

NAG 3-1626 Michigan State University 5168
 STUDIES OF WIND-AIDED FLAME SPREAD OVER THEN CELLU LOSIC
 FUELS IN MICROGRAVITY
Period Obligations
 06/22/1994-06/21/1995 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
 I S WICHMAN LERC/H D ROSS 46-Mech Engr

NAG 5-2434 Michigan State University 5169
 X-RAY BIMODALITY IN A2151
Period Obligations
 11/16/1993-11/30/1994 FY94: \$18,000 TOTAL: \$18,000
Prin. Invest. NASA Tech. Officer CASE Category
 T C BEERS GSFC/R PETRE 11-Astronomy

NAG 5-2489 Michigan State University 5170
 STELLAR/SOLAR CONVECTION SIMULATIONS
Period Obligations
 02/04/1994-02/14/1995 FY94: \$29,982 TOTAL: \$29,982
Prin. Invest. NASA Tech. Officer CASE Category
 R F STEIN GSFC/J R FISCHER 22-Computer Science

NAG 5-2621 Michigan State University 5171
 COORDINATED HST - EUVE OBSERVATIONS OF YZ CMI
Period Obligations
 07/01/1994-06/30/1995 FY94: \$7,461 TOTAL: \$7,461
Prin. Invest. NASA Tech. Officer CASE Category
 S L HAWLEY GSFC/R J OLIVERSEN 11-Astronomy

NAGW 1695 Michigan State University 5172
 SOLAR CONVECTOR DYNAMICS AND OSCILLATIONS
Period Obligations
 02/27/1989-11/30/1994 FY94: \$49,000 TOTAL: \$240,186
Prin. Invest. NASA Tech. Officer CASE Category
 R F STEIN HQ/J D BOHLIN 13-Physics
 HQ/S KANE

NCC 1-175 Michigan State University 5173
 DEVELOPING A DYNAMIC MODEL AND SIMULATION PROGRAM FOR
 THE ADVANCED AEROELASTIC ROTOR EXPERIMENT SYS
Period Obligations
 03/31/1993-05/31/1995 FY94: \$62,314 TOTAL: \$118,979
Prin. Invest. NASA Tech. Officer CASE Category
 P M FITZSIMONS LARC/P H MIRICK 41-Aero Engr
 LARC/W T YEAGER

NGT 00-050-791 Michigan State University 5174
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/28/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 K L POFF HQ/F C OWENS 55-Agriculture Sci

NGT 00-050-831 Michigan State University 5175
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/01/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 M G KANATZIDIS HQ/F C OWENS 12-Chemistry

NGT 00-070-316 Michigan State University 5176
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 06/29/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 M KEMP HQ/D K RUSSELL 99-Multi-Discip
 M CRIMP

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NGT 00-070-376 Michigan State University 5177
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period *Obligations*
 08/23/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B H CHENG HQ/D K RUSSELL 22-Computer Science

NAGW 3390 Michigan Technological University 5185
 MODELING OF COLLISION INDUCED ABSORPTION SPECTRA OF
 CO₂-CO₂ PAIRS FOR PLANETARY ATMOSPHERE OF VENUS
Period *Obligations*
 03/09/1993-03/31/1995 FY94: \$40,625 TOTAL: \$81,627
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A BORYSOW HQ/J BERGSTRALH 31-Atmos Sci

NAG 2-820 Michigan Technological University 5178
 DEVELOPMENT OF A RATIONAL MODELING APPROACH FOR THE
 DESIGN, AND OPTIMIZATION OF THE MULTIFILTRATION..
Period *Obligations*
 12/15/1992-12/31/1994 FY94: \$77,666 TOTAL: \$157,535
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D W HAND ARC/J E FINN 43-Chem Engr
 J C CRITTENDEN ARC/E L FORCE

NAGW 4088 Michigan Technological University 5186
 CONTRIBUTION OF VOLCANIC ACTIVITY TO THE SULFUR DIOXIDE
 BUDGET
Period *Obligations*
 07/28/1994-05/31/1995 FY94: \$62,247 TOTAL: \$62,247
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G BLUTH HQ/M BALTUCK 31-Atmos Sci

NAG 3-560 Michigan Technological University 5179
 FLUID FLOW IN PARTLY SOLIDIFIED SYSTEMS
Period *Obligations*
 06/06/1984-02/10/1994 FY94: \$0 TOTAL: \$550,198
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A HELLAWEILL LERC/T K GLASGOW 47-Materials Engr
 J R SARAZIN LERC/H GRAY

NCC 1-145 Michigan Technological University 5187
 ACOUSTIC PROPAGATION IN FORESTED AREAS
Period *Obligations*
 09/17/1990-06/30/1995 FY94: \$0 TOTAL: \$74,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J C ROGERS LARC/A W MUELLER 13-Physics
 F J PELON LARC/D R HOAD

NAG 3-1109 Michigan Technological University 5180
 NUMERICAL STUDY OF DILUTION JET MIXING OF COMBUSTION
Period *Obligations*
 12/21/1989-12/19/1994 FY94: \$82,000 TOTAL: \$366,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S L YANG LERC/H L NGUYEN 13-Physics

NGT 00-030-061 Michigan Technological University 5188
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 09/23/1992-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J M KWIATKOWSKI HQ/D M BUTLER 39-Env Sci, NEC
 A KOSTINSKI HQ/G S WILSON

NAG 3-1462 Michigan Technological University 5181
 THERMOSOLUTAL CONVECTION AND PARTICULATE TRANSPORT DURING
 ALLOY SOLIDIFICATION
Period *Obligations*
 03/04/1993-02/28/1994 FY94: \$0 TOTAL: \$50,760
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A HELLAWEILL LERC/A CHAIT 47-Materials Engr

NGT 00-030-128 Michigan Technological University 5189
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A N PILANT HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NAG 3-1659 Michigan Technological University 5182
 THERMAL-SOLUTAL CONVECTION AND PARTICULATE TRANSPORT
 DURING ALLOY SOLIDIFICATION
Period *Obligations*
 08/01/1994-07/31/1995 FY94: \$52,266 TOTAL: \$52,266
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A HELLAWEILL LERC/T GLASGOW 47-Materials Engr

NGT 00-030-174 Michigan Technological University 5190
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 08/27/1992-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W I ROSE HQ/G ASRAR 32-Geological Sci
 HQ/D M BUTLER

NAG 5-1838 Michigan Technological University 5183
 GROUND TRUTH SPECTROMETRY AND IMAGERY OF ERUPTION
 CLOUDS TO MAXIMIZE UTILITY OF SATELLITE IMAGERY
Period *Obligations*
 11/26/1991-11/30/1994 FY94: \$82,000 TOTAL: \$208,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W I ROSE GSFC/L S WALTER 32-Geological Sci

NGT 00-050-650 Michigan Technological University 5191
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 07/24/1990-09/30/1993 FY94: \$0 TOTAL: \$69,032
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 I MISKIOGLU HQ/F C OWENS 46-Mech Engr

NAG 5-2324 Michigan Technological University 5184
 COMPARISON OF AVHRR AND TOMS IMAGERY OF VOLCANIC CLOUDS
Period *Obligations*
 07/14/1993-07/31/1995 FY94: \$31,370 TOTAL: \$61,728
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W I ROSE GSFC/A J KRUEGER 31-Atmos Sci

NGT 00-051-024 Michigan Technological University 5192
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 07/14/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W C KERFOOT ARC/M MOORE 51-Biological Sci

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NAGW 2010 Saginaw Valley State University 5193
 EARTH SCIENCE INFORMATION: PLANNING FOR THE INTEGRATION
 AND USE OF GLOBAL CHANGE DATA

Period	Obligations
03/23/1990-04/30/1993	FY94: \$0 TOTAL: \$12,900,000
Prin. Invest.	NASA Tech. Officer CASE Category
R S YIEN	HQ/D M BUTLER 39-Env Sci, NEC
	HQ/E NJOKU

NAG 1-1317 University of Michigan - Ann Arbor 5200
 SUPERPLASTIC FORMABILITY OF PARTICULATE REINFORCED AL-LI
 ALLOY D

Period	Obligations
07/12/1991-09/30/1994	FY94: \$0 TOTAL: \$106,832
Prin. Invest.	NASA Tech. Officer CASE Category
A GHOSH	LARC/W D BREWER 47-Materials Engr
	LARC/D M ROYSTER

NAG 1-492 University of Michigan - Ann Arbor 5194
 DESIGN AND EVALUATION OF FLIGHT CRUCIAL CONTROL
 COMPUTERS

Period	Obligations
07/09/1984-12/31/1993	FY94: TOTAL: \$252,270
Prin. Invest.	NASA Tech. Officer CASE Category
K G SHIN	LARC/R W BUTLER 22-Computer Science
	LARC/G B FINELLI

NAG 1-1331 University of Michigan - Ann Arbor 5201
 HIGH RESOLUTION DOPPLER LIDAR MEASUREMENTS - FDP

Period	Obligations
09/24/1991-02/28/1995	FY94: \$75,000 TOTAL: \$225,322
Prin. Invest.	NASA Tech. Officer CASE Category
V J ABREU	LARC/G L MADDREA 13-Physics
P B MAYS	LARC/L R POOLE
A K SMITH	

NAG 1-869 University of Michigan - Ann Arbor 5195
 AN ADAPTIVE MULTI-GRID CODE FOR FLUID DYNAMICS BASED
 ON GENUINELY MULTI-DIMENSIONAL CONCEPTS

Period	Obligations
03/25/1988-11/30/1994	FY94: \$59,976 TOTAL: \$477,518
Prin. Invest.	NASA Tech. Officer CASE Category
B VAN LEER	LARC/J L THOMAS 21-Mathematics
K POWELL	LARC/J C SOUTH JR.

NAG 1-1410 University of Michigan - Ann Arbor 5202
 ELECTORRHEOLOGY FOR SMART LANDING GEAR - FDP
 INCREMENTALLY FUNDED THROUGH DECEMBER 31, 1992

Period	Obligations
03/20/1992-12/31/1994	FY94: \$40,000 TOTAL: \$107,153
Prin. Invest.	NASA Tech. Officer CASE Category
R D ERVIN	LARC/W E HOWELL 46-Mech Engr
Z LOU	LARC/R H DAUGHERTY
F E FILSKO	

NAG 1-1040 University of Michigan - Ann Arbor 5196
 FIBER BUCKLING IN LAMINATED PLATES

Period	Obligations
08/03/1989-12/31/1992	FY94: TOTAL: \$71,583
Prin. Invest.	NASA Tech. Officer CASE Category
A M WAAS	LARC/M J SHUART 41-Aero Engr
	LARC/D C JEGLEY

NAG 1-1419 University of Michigan - Ann Arbor 5203
 EFFICIENT REORIENTATION MANEUVERS FOR SPACECRAFT WITH
 MULTIPLE ARTICULATED PAYLOADS

Period	Obligations
03/09/1992-06/03/1993	FY94: TOTAL: \$54,380
Prin. Invest.	NASA Tech. Officer CASE Category
N H MCCLAMROCH	LARC/S M JOSHI 42-Astro Engr

NAG 1-1220 University of Michigan - Ann Arbor 5197
 STUDY OF DESIGN FOR VALIDATION IN DISTRIBUTED
 FAULT-TOLERANT SYSTEMS

Period	Obligations
02/14/1991-10/31/1994	FY94: \$87,005 TOTAL: \$446,709
Prin. Invest.	NASA Tech. Officer CASE Category
K G SHIN	LARC/A L WHITE 22-Computer Science

NAG 1-1465 University of Michigan - Ann Arbor 5204
 GLOBAL TROPOSPHERIC EXPERIMENT AT THE HONG KONG
 ATMOSPHERIC CHEMISTRY MEASUREMENT STATION

Period	Obligations
12/07/1992-12/06/1994	FY94: \$0 TOTAL: \$61,285
Prin. Invest.	NASA Tech. Officer CASE Category
M A CARROLL	LARC/J M HOELL 31-Atmos Sci
	LARC/R J BENDURA

NAG 1-1290 University of Michigan - Ann Arbor 5198
 ANALYSIS OF UNSTEADY FLOW IN A SCRAMJET

Period	Obligations
06/26/1991-05/31/1994	FY94: \$0 TOTAL: \$168,785
Prin. Invest.	NASA Tech. Officer CASE Category
T C ADAMSON	LARC/R W GUY 41-Aero Engr
W H WOODRUFF	LARC/G Y ANDERSON

NAG 1-1478 University of Michigan - Ann Arbor 5205
 ANALYSIS OF CONFORMAL ANTENNAS IN COMPOSITE SURFACES
 NLPN 92-1107

Period	Obligations
02/05/1993-02/04/1995	FY94: \$75,000 TOTAL: \$125,000
Prin. Invest.	NASA Tech. Officer CASE Category
J L VOLAKIS	LARC/F B BECK 45-Elec Engr

NAG 1-1315 University of Michigan - Ann Arbor 5199
 CORRELATIVE MEASUREMENT SUPPORT OF THE UPPER
 ATMOSPHERE RESEARCH SATELLITE (UARS)

Period	Obligations
07/17/1991-03/31/1995	FY94: \$85,000 TOTAL: \$345,000
Prin. Invest.	NASA Tech. Officer CASE Category
T L KILLEEN	LARC/J G WELLS 31-Atmos Sci
F G MCCORMAC	
R M JOHNSON	

NAG 1-1493 University of Michigan - Ann Arbor 5206
 DEVELOPMENT AND OPERATION OF A SOFTWARE FAULT
 INJECTOR

Period	Obligations
04/30/1993-10/31/1994	FY94: \$0 TOTAL: \$93,986
Prin. Invest.	NASA Tech. Officer CASE Category
K G SHIN	LARC/A L WHITE 22-Computer Science

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NAG 1-1514 University of Michigan - Ann Arbor 5207
 PROPOSAL FOR RESEARCH INTO COMPUTATIONAL ACOUSTICS
 NLPN 93-425

Period	Obligations	
05/28/1993-05/31/1994	FY94: \$1	TOTAL: \$94,141
Prin. Invest.	NASA Tech. Officer	CASE Category
P L ROE	LARC/K S BRENTNER	41-Aero Engr

NAG 2-879 University of Michigan - Ann Arbor 5214
 DATA ARCHIVE FOR NOX AND NOY FROM OBSERVATIONS AND
 CONSTRUCTION AND TESTING OF AIRBORNE INSTRUMENT FOR

Period	Obligations	
01/10/1994-07/31/1994	FY94: \$90,000	TOTAL: \$90,000
Prin. Invest.	NASA Tech. Officer	CASE Category
M A CARROLL	ARC/E CONDON	31-Atmos Sci
	ARC/A MARGOZZI	

NAG 1-1544 University of Michigan - Ann Arbor 5208
 A FOUR CHANNEL NO/O3 CHEMILUMINESCENCE INSTRUMENT FOR
 SIMULTANEOUS AIRBORNE MEASUREMENTS OF NITRIC

Period	Obligations	
09/28/1993-09/27/1995	FY94: \$237,987	TOTAL: \$596,751
Prin. Invest.	NASA Tech. Officer	CASE Category
M A CARROLL	LARC/G L GREGORY	31-Atmos Sci
	LARC/J M HOELL JR.	

NAG 3-988 University of Michigan - Ann Arbor 5215
 STUDIES ON HIGH-PERFORMANCE ELECTRONIC DEVICES AT
 CRYOGENIC TEMPERATURES (77K)

Period	Obligations	
02/01/1989-02/15/1995	FY94: \$74,999	TOTAL: \$473,915
Prin. Invest.	NASA Tech. Officer	CASE Category
P K BHATTACHARGA	LERC/S A ALTEROVITZ	45-Elec Engr

NAG 1-1565 University of Michigan - Ann Arbor 5209
 MECHANISMS OF ELECTORRHEOLOGICAL ACTIVITY

Period	Obligations	
01/21/1994-01/21/1994	FY94: \$0	TOTAL: \$0
Prin. Invest.	NASA Tech. Officer	CASE Category
F E FILISKO	LARC/W E HOWELL	12-Chemistry
	LARC/R D DAUGHERTY	

NAG 3-1133 University of Michigan - Ann Arbor 5216
 DROPLET EVAPORATION UNDER MICROGRAVITY

Period	Obligations	
01/31/1990-06/23/1995	FY94: \$40,000	TOTAL: \$210,660
Prin. Invest.	NASA Tech. Officer	CASE Category
V S ARPACI	LERC/A T CHAI	19-Phys Sci, NEC

NAG 2-488 University of Michigan - Ann Arbor 5210
 INTERDISCIPLINARY SCIENTIST ON PIONEER VENUS MISSI

Period	Obligations	
01/01/1988-12/31/1993	FY94: \$0	TOTAL: \$924,991
Prin. Invest.	NASA Tech. Officer	CASE Category
T DONAHUE	ARC/L E LASHER	11-Astronomy
	ARC/R A CRAIG	

NAG 3-1163 University of Michigan - Ann Arbor 5217
 EFFECTS OF MISTUNING ON THE FORCED RESPONSE OF TUR
 BOMACHINERY ROTORS

Period	Obligations	
04/17/1990-12/31/1994	FY94: \$0	TOTAL: \$111,721
Prin. Invest.	NASA Tech. Officer	CASE Category
C PIERRE	LERC/G L STEFKO	46-Mech Engr
	LERC/L J KIRALY	

NAG 2-491 University of Michigan - Ann Arbor 5211
 INTERDISCIPLINARY SCIENTIST - PIONEER VENUS MISSIO

Period	Obligations	
10/01/1987-09/30/1994	FY94: \$0	TOTAL: \$953,077
Prin. Invest.	NASA Tech. Officer	CASE Category
A NAGY	ARC/L E LASHER	11-Astronomy
	ARC/R O FIMMEL	

NAG 3-1245 University of Michigan - Ann Arbor 5218
 THE INVESTIGATION OF LAMINAR JET DIFFUSION FLAMES

Period	Obligations	
03/01/1991-04/24/1997	FY94: \$182,651	TOTAL: \$578,175
Prin. Invest.	NASA Tech. Officer	CASE Category
G M FAETH	LERC/D STOCKER	49-Engr, NEC

NAG 2-644 University of Michigan - Ann Arbor 5212
 CONTINUED PROCESSING AND ANALYSIS OF THE DATA FROM
 THE PIONEER VENUS ORBITER ELECTRON TEMPERATURE ..

Period	Obligations	
06/20/1990-09/30/1993	FY94: \$0	TOTAL: \$586,911
Prin. Invest.	NASA Tech. Officer	CASE Category
L H BRACE	ARC/L E LASHER	11-Astronomy
	ARC/R O FIMMEL	

NAG 3-1310 University of Michigan - Ann Arbor 5219
 A PRELIMINARY STUDY TO FORCED CONVECTION BOILING I N
 MICROGRAVITY

Period	Obligations	
12/05/1991-01/31/1995	FY94: \$53,992	TOTAL: \$155,347
Prin. Invest.	NASA Tech. Officer	CASE Category
H MERTE	LERC/J A PLATT	46-Mech Engr
	LERC/R W VERNON	

NAG 2-866 University of Michigan - Ann Arbor 5213
 DEVELOPMENT AND PARALLELIZATION OF THE FINITE ELEMEN T
 METHOD WITH MIXED TERMINATION SCHEMES

Period	Obligations	
08/11/1993-10/31/1994	FY94: \$0	TOTAL: \$150,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J L VOLAKIS	ARC/A C WOO	45-Elec Engr
	ARC/M J SCHUH	

NAG 3-1317 University of Michigan - Ann Arbor 5220
 COMPUTATIONAL STUDIES OF DROP COLLISION AND COALESCEN
 CE

Period	Obligations	
01/24/1992-05/03/1995	FY94: \$68,110	TOTAL: \$194,090
Prin. Invest.	NASA Tech. Officer	CASE Category
G TRYGGVASON	LERC/D A JACQMIN	46-Mech Engr

NAG 3-1460 University of Michigan - Ann Arbor 5221
 AN EXPERIMENTAL AND THEORETICAL STUDY OF RADIATIVE E
 XTINCTION OF DIFFUSION FLAMES

Period	Obligations	
02/18/1993-02/21/1995	FY94: \$55,000	TOTAL: \$120,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A ATREYA	LERC/K R SACKSTEDER	49-Engr, NEC

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NAG 3-1504 University of Michigan - Ann Arbor 5222
 A PRELIMINARY INVESTIGATION OF HALL THRUSTER TECHNOLOGY
Period *Obligations*
 06/10/1993-07/18/1995 FY94: \$24,960 TOTAL: \$75,454
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A D GALLIMORE LERC/F M CURREN 11-Astronomy

NAG 3-1572 University of Michigan - Ann Arbor 5223
 USED FOR MODERN COMPUTATIONAL TOOLS TO MODEL THE THERMAL CHARACTERISTICS OF A 30-CM
Period *Obligations*
 02/16/1994-01/15/1995 FY94: \$20,021 TOTAL: \$20,021
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A D GALLIMORE LERC/J S SOVEY 49-Engr, NEC
 LERC/T W HAAG

NAG 3-1639 University of Michigan - Ann Arbor 5224
 FLAME-VORTEX INTERACTIONS IMAGED IN MICROGRAVITY
Period *Obligations*
 06/30/1994-06/29/1995 FY94: \$135,000 TOTAL: \$135,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J F DRISCOLL LERC/J E BROOKER 49-Engr, NEC

NAG 5-465 University of Michigan - Ann Arbor 5225
 DYNAMIC AND THERMODYNAMIC ANALYSES OF THE NEUTRAL UPPER ATMOSPHERE
Period *Obligations*
 10/01/1984-01/31/1993 FY94: \$0 TOTAL: \$2,627,712
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P B HAYS GSFC/G D BULLOCK 19-Phys Sci, NEC
 T L KILLEEN GSFC/R HOFFMAN

NAG 5-472 University of Michigan - Ann Arbor 5226
 DYNAMICS EXPLORER INVESTIGATIONS
Period *Obligations*
 10/01/1984-01/31/1994 FY94: \$0 TOTAL: \$824,673
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A F NAGY GSFC/G D BULLOCK 19-Phys Sci, NEC
 GSFC/R A HOFFMAN

NAG 5-653 University of Michigan - Ann Arbor 5227
 SOUNDING ROCKET SPECTROMETER TO MEASURE DOPPLER
Period *Obligations*
 01/01/1989-12/31/1994 FY94: \$158,033 TOTAL: \$696,303
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J T CLARKE GSFC/L J EARLY 13-Physics
 GSFC/R H PLESS

NAG 5-1030 University of Michigan - Ann Arbor 5228
 ULTRAVIOLET OBSERVATIONS OF THE AURORA AND ELECTROGLOW FOR NEPTUNE
Period *Obligations*
 01/01/1988-12/31/1994 FY94: \$5,000 TOTAL: \$175,034
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T J CLARKE GSFC/D WEST 11-Astronomy

NAG 5-1500 University of Michigan - Ann Arbor 5229
 THEORETICAL STUDIES OF NON-EQUILIBRIUM SPACE PLASMA FLOWS
Period *Obligations*
 03/01/1991-04/30/1994 FY94: \$0 TOTAL: \$575,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T I GOMBOSI GSFC/T J BIRMINGHAM 13-Physics

NAG 5-1502 University of Michigan - Ann Arbor 5230
 AN ASSESSMENT OF TWILIGHT AIRGLOW INVERSION PROCEDURES USING ATMOSPHERE EXPLORER OBSERVATIONS
Period *Obligations*
 03/27/1991-04/14/1993 FY94: \$0 TOTAL: \$40,621
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 I C MCDADE GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-1542 University of Michigan - Ann Arbor 5231
 RING CURRENT ENERGY TRANSFER TO THE THERMAL PLASMA
Period *Obligations*
 04/17/1991-04/30/1993 FY94: \$0 TOTAL: \$109,780
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J U KOZYRA GSFC/G D BULLOCK 19-Phys Sci, NEC

NAG 5-1658 University of Michigan - Ann Arbor 5232
 X-RAY OBSERVATIONS OF THE HOT INTERSTELLAR MEDIUM IN SPIRAL GALAXIES
Period *Obligations*
 06/27/1991-07/31/1994 FY94: \$0 TOTAL: \$77,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J N BREGMAN GSFC/R PETRE 11-Astronomy

NAG 5-1691 University of Michigan - Ann Arbor 5233
 DEVELOP A SOLAR FLUX MONITOR FOR EARTH AND PLANETARY MISSIONS
Period *Obligations*
 07/15/1991-08/31/1994 FY94: \$0 TOTAL: \$113,555
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G R CARIGNAN GSFC/W R HOEGY 19-Phys Sci, NEC
 GSFC/J M GREBOWSKY

NAG 5-1781 University of Michigan - Ann Arbor 5234
 A CONTINUING EVALUATION OF EOSDIS VO
Period *Obligations*
 09/12/1991-09/14/1994 FY94: \$85,928 TOTAL: \$169,257
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A W ENGLAND GSFC/H K RAMAPRIYAN 39-Env Sci, NEC

NAG 5-1820 University of Michigan - Ann Arbor 5235
 SEARCH FOR CORRELATED RADIO X-RAY VARIABILITY IN A CTIVE GALACTIC NUCLEI
Period *Obligations*
 11/06/1991-08/14/1993 FY94: \$0 TOTAL: \$35,820
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 H D ALLER GSFC/R PETRE 11-Astronomy

NAG 5-1955 University of Michigan - Ann Arbor 5236
 THE GEOMETRY AND FILLING FACTOR OF THE HOT INTERSTELLAR MEDIUM
Period *Obligations*
 03/26/1992-03/31/1995 FY94: \$60,000 TOTAL: \$137,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J N BREGMAN GSFC/R PETRE 11-Astronomy

NAG 5-2071 University of Michigan - Ann Arbor 5237
 MODELS FOR GAMMA-RAY BURSTS
Period *Obligations*
 08/25/1992-08/31/1994 FY94: \$0 TOTAL: \$105,048
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M FATUZZO GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NASA'S UNIVERSITY PROGRAM

MICHIGAN (Continued)

NAG 5-2110 University of Michigan - Ann Arbor 5238
 VARIATION OF THE SOLAR LYMAN ALPHA LINE PROFILE WITH SOLAR ACTIVITY
Period *Obligations*
 10/08/1992-01/31/1995 FY94: \$13,560 TOTAL: \$19,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M R COMBI GSFC/D WEST 11-Astronomy

NAG 5-2228 University of Michigan - Ann Arbor 5239
 QUANTITATIVE ANALYSIS OF AURORAL OVAL DYNAMICS USING COMPUTER AIDED TECHNIQUES
Period *Obligations*
 04/07/1993-12/31/1994 FY94: \$0 TOTAL: \$39,202
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C R CLAUSER GSFC/D FAIRFIELD 13-Physics
 GSFC/D N BAKER

NAG 5-2250 University of Michigan - Ann Arbor 5240
 A MARS UPPER ATMOSPHERE DYNAMICS, ENERGETICS, AND EVOLUTION (MAUDEE) MISSION
Period *Obligations*
 04/27/1993-04/30/1995 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T L KILLEEN GSFC/R E HARTLE 19-Phys Sci, NEC

NAG 5-2397 University of Michigan - Ann Arbor 5241
 ANALYSIS OF IUE OBSERVATIONS OF HYDROGEN IN COMETS
Period *Obligations*
 10/15/1993-10/31/1994 FY94: \$30,500 TOTAL: \$30,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M R COMBI GSFC/D WEST 11-Astronomy

NAG 5-2457 University of Michigan - Ann Arbor 5242
 X-RAY EMISSIONS FROM COMPACT GROUPS OF GALAXIES
Period *Obligations*
 01/11/1994-01/14/1995 FY94: \$29,000 TOTAL: \$29,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A E EVRARD GSFC/R PETRE 11-Astronomy

NAG 5-2458 University of Michigan - Ann Arbor 5243
 SPECTROSCOPIC STUDY OF JOVIAN AURORAL PHENOMENA DISCOVERED BY HST/FOC
Period *Obligations*
 01/11/1994-01/14/1995 FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W HARRIS GSFC/D WEST 11-Astronomy

NAG 5-2459 University of Michigan - Ann Arbor 5244
 JOVIAN EQUATORIAL H LYMAN-ALPHA AND THE IONOSPHERE
Period *Obligations*
 01/11/1994-01/14/1995 FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G E BALLESTER GSFC/D WEST 11-Astronomy

NAG 5-2506 University of Michigan - Ann Arbor 5245
 CORRELATIVE ANALYSIS OF ENERGETIC GAMMA-RAY EMISSION FROM THE CRAB NEBULA NAD GEMINGA
Period *Obligations*
 02/16/1994-02/28/1995 FY94: \$52,435 TOTAL: \$52,435
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C W AKERLOF GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NAG 5-2522 University of Michigan - Ann Arbor 5246
 THE X-RAY SIGNATURE OF MERGERS IN ELLIPTICALS
Period *Obligations*
 02/10/1994-02/28/1995 FY94: \$28,395 TOTAL: \$28,395
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D O RICHSTONE GSFC/R PETRE 11-Astronomy

NAG 5-2552 University of Michigan - Ann Arbor 5247
 SOLAR AND MAGNETOSPHERE INPUTS TO THE MLTI REGION INTERDISCIPLINARY SCIENCE INVESTIGATION.
Period *Obligations*
 03/15/1994-12/31/1994 FY94: \$49,000 TOTAL: \$49,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J KOZYRA GSFC/R CAMPBELL 11-Astronomy

NAG 5-2649 University of Michigan - Ann Arbor 5248
 THE ENCOUNTER OF P/SOEMAKER - LEVY 9 WITH THE JOVIAN PLASMA TORUS AND EXTENDED SODIUM CLOUD
Period *Obligations*
 07/05/1994-07/14/1995 FY94: \$13,000 TOTAL: \$13,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R J NICIEJENSKI GSFC/R J OLIVERSEN 11-Astronomy

NAG 5-2732 University of Michigan - Ann Arbor 5249
 THE CLUSTER MASS FUNCTION AND BARYON FRACTION FROM A COMPLETE X-RAY SAMPLE
Period *Obligations*
 09/21/1994-03/31/1996 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J BREGMAN GSFC/N WHITE 11-Astronomy

NAG 5-5003 University of Michigan - Ann Arbor 5250
 MEASUREMENTS OF THE ION DENSITY OF THE E-REGION AND MEASUREMENT OF ATOMIC OXYGEN IN DIFFUSE AURORA
Period *Obligations*
 04/16/1993-03/31/1995 FY94: \$35,437 TOTAL: \$95,639
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W E SHARP GSFC/L J EARLY 13-Physics
 GSFC/R H PLESS

NAG 8-141 University of Michigan - Ann Arbor 5251
 COMET RENDEZVOUS ASTEROID FLYBY MISSION
Period *Obligations*
 10/05/1989-01/01/1993 FY94: TOTAL: \$31,760
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T GOMBOSI MSFC/T E MOORE 41-Aero Engr
 MSFC/W L CHISHOLM

NAG 8-858 University of Michigan - Ann Arbor 5252
 REMOTE SOUNDING OF TROPOSPHERIC MINOR CONSTITUENTS
Period *Obligations*
 10/23/1990-10/31/1992 FY94: TOTAL: \$33,496
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S R DRAYSON MSFC/KOCZOR 31-Atmos Sci
 P B HAYS

NAG 8-919 University of Michigan - Ann Arbor 5253
 MOES DEVELOPMENT AND TEST FOR BALLOON EXPERIMENT
Period *Obligations*
 06/11/1992-06/09/1993 FY94: \$0 TOTAL: \$50,801
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P B HAYS MSFC/R J KEZOR 31-Atmos Sci

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NAG 9-465 University of Michigan - Ann Arbor 5254
 PREDICTING VARIATION IN DRUG PLASMA LEVELS DUE TO VARIABLE
 GASTRIC EMPTYING AND INTESTINAL TRANSIT
Period *Obligations*
 08/01/1990-06/01/1995 FY94: \$68,950 TOTAL: \$256,850
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G L AMIDON JSC/L PUTCHA 56-Medical Sciences
 JSC/N CINTRON

NAG 9-652 University of Michigan - Ann Arbor 5255
 SHEAR SENSITIVES OF HUMAN BONE MARROW CULTURES
Period *Obligations*
 10/28/1992-12/01/1994 FY94: \$105,000 TOTAL: \$210,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B PALSSON HQ/G SPAULDING 51-Biological Sci

NAG 9-709 University of Michigan - Ann Arbor 5256
 SPIFEX
Period *Obligations*
 08/30/1993-01/01/1995 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A GALLIMORE JSC/R MACHIN 41-Aero Engr

NAGW 176 University of Michigan - Ann Arbor 5257
 INTERACTION OF BIOTA AND ATMOSPHERE: THE GEOLOGICAL
 RECORDS
Period *Obligations*
 04/01/1981-12/31/1994 FY94: \$0 TOTAL: \$1,368,351
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J C WALKER HQ/J D RUMMEL 12-Chemistry
 HQ/M AVERNER

NAGW 631 University of Michigan - Ann Arbor 5258
 PARTICIPATION IN THE MARS 88 MISSION
Period *Obligations*
 06/01/1984-05/31/1993 FY94: \$0 TOTAL: \$269,233
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A F NAGY HQ/H C BRINTON 31-Atmos Sci
 HQ/W L QUAIDE

NAGW 1101 University of Michigan - Ann Arbor 5259
 EXTENDED ECOSYSTEMS SIGNATURES
Period *Obligations*
 06/01/1987-12/31/1992 FY94: \$0 TOTAL: \$1,194,769
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F T ULABY HQ/J C DODGE 39-Env Sci, NEC

NAGW 1334 University of Michigan - Ann Arbor 5260
 CENTER FOR NEAR-MILLIMETER WAVE COMM. AND SENSING
 TECH.
Period *Obligations*
 07/13/1988-10/31/1994 FY94: \$1,350,000 TOTAL: \$10,734,225
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F T ULABY HQ/S C HARTMAN 49-Engr, NEC

NAGW 1362 University of Michigan - Ann Arbor 5261
 THE USE OF ERS-1 SAR IMAGING DATA
Period *Obligations*
 08/03/1988-08/31/1993 FY94: \$0 TOTAL: \$225,052
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M C DOBSON HQ/D E WICKLAND 39-Env Sci, NEC
 J CIMINO HQ/T J PIEPER
 F ULABY

NAGW 1366 University of Michigan - Ann Arbor 5262
 MODELING OF COMETARY ATMOSPHERE
Period *Obligations*
 07/13/1988-11/30/1994 FY94: \$85,329 TOTAL: \$464,832
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T I GOMBOSI HQ/J T BERGSTRALH 11-Astronomy
 HQ/W L QUIADE

NAGW 1535 University of Michigan - Ann Arbor 5263
 THE EFFECTS ON THE IONOSPHERE OF INERTIA IN THE HIGH
Period *Obligations*
 12/02/1988-04/30/1994 FY94: \$0 TOTAL: \$142,234
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T L KILLEEN HQ/M M MELLOTT 13-Physics
 1 0 HQ/T W PERRY

NAGW 1619 University of Michigan - Ann Arbor 5264
 STUDIES OF IONOSPHERE-PLASMASPHERE-MAGNETOSPHERE
 SYSTEM
Period *Obligations*
 02/27/1989-12/31/1994 FY94: \$132,000 TOTAL: \$1,281,368
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A F NAGY HQ/M M MELLOTT 13-Physics
 HQ/T W PERRY

NAGW 1642 University of Michigan - Ann Arbor 5265
 SUPERCONDUCTING MAGNET INSTRUMENT FOR LIGHT ISOTOPES
Period *Obligations*
 01/26/1989-01/31/1995 FY94: \$190,000 TOTAL: \$1,090,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G TARLE HQ/M M MELLOTT 13-Physics
 HQ/W V JONES

NAGW 1744 University of Michigan - Ann Arbor 5266
 STUDIES OF LARGE SCALE STRATOSPHERIC DYNAMICS
Period *Obligations*
 06/16/1989-12/31/1992 FY94: \$0 TOTAL: \$136,171
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A K SMITH HQ/R D MCPETERS 31-Atmos Sci
 HQ/M J PRATHER

NAGW 1766 University of Michigan - Ann Arbor 5267
 ANALYSIS OF MULTI=D-WAVELENGTH OBSERVATIONS OF THE
 AURORA
Period *Obligations*
 05/31/1989-10/31/1994 FY94: \$68,632 TOTAL: \$338,327
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J T CLARKE HQ/J T BERGSTRALH 11-Astronomy

NAGW 1771 University of Michigan - Ann Arbor 5268
 A PROGRAM FOR RESEARCH IN PLANETARY ATMOSPHERES
Period *Obligations*
 05/26/1989-11/30/1996 FY94: \$90,000 TOTAL: \$479,508
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S ATREYA HQ/J T BERGSTRALH 11-Astronomy

NAGW 1907 University of Michigan - Ann Arbor 5269
 THE DISTRIBUTION OF GAS IN THE INNER CORNAE OF COMETS
Period *Obligations*
 12/27/1989-04/30/1995 FY94: \$80,000 TOTAL: \$354,856
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M R COMBI HQ/J BERGSTRALH 11-Astronomy

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NAGW 1908 University of Michigan - Ann Arbor 5270
 AN ANALYSIS OF CCD IMAGES OF THE COMA OF COMET HALLEY
Period *Obligations*
 11/03/1989-09/30/1992 FY94: TOTAL: \$127,387
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M R COMBI HQ/J H RAHE 11-Astronomy

NAGW 1946 University of Michigan - Ann Arbor 5271
 STUDYING THE DYNAMICS AND PHOTOCHEMICAL KINETICS OF
 THE COMA OF COMET P/HALLEY
Period *Obligations*
 01/24/1990-10/31/1992 FY94: \$0 TOTAL: \$29,087
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M COMBI HQ/J BERGSTRAH 11-Astronomy

NAGW 1983 University of Michigan - Ann Arbor 5272
 MAPPING REGIONAL FREEZE/THAW PATTERNS WITH SATELLITE
 MICROWAVE RADIOMETRY
Period *Obligations*
 04/25/1990-12/31/1992 FY94: \$0 TOTAL: \$300,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A W ENGLAND HQ/G ASRAR 39-Env Sci, NEC
 HQ/T J PIEPER

NAGW 2008 University of Michigan - Ann Arbor 5273
 INVESTIGATION OF THE ROLE OF SOFT ELECTRON PRECIPITATION
 IN THE EXCITATION OF SAR ARCS
Period *Obligations*
 05/04/1990-09/30/1992 FY94: TOTAL: \$36,851
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E G FONTHEIM HQ/M M MELLOTT 13-Physics
 HQ/T PERRY

NAGW 2124 University of Michigan - Ann Arbor 5274
 A PRECISE MEASUREMENT OF THE TEMPERATURE OF THE COSMIC
 BACKGROUND RADIATION
Period *Obligations*
 05/23/1990-05/31/1995 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D J HEYGI HQ/G LEVY 31-Atmos Sci

NAGW 2125 University of Michigan - Ann Arbor 5275
 A PRECISE MEASUREMENT OF THE TEMPERATURE OF THE COSMIC
 BACKGROUND RADIATION
Period *Obligations*
 05/23/1990-02/28/1995 FY94: \$0 TOTAL: \$262,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D J HEYGI HQ/G LEVY 31-Atmos Sci

NAGW 2135 University of Michigan - Ann Arbor 5276
 THE HOT INTERSTELLAR MEDIUM IN SPIRAL AND ELLIPTICAL
 GALAXIES
Period *Obligations*
 10/23/1990-12/31/1994 FY94: \$181,778 TOTAL: \$783,229
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J N BREGMAN HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2151 University of Michigan - Ann Arbor 5277
 INVESTIGATION OF POLARIMETRIC RADAR RESPONSE TO SOIL
 MOISTURE AND SURFACE ROUGHNESS
Period *Obligations*
 07/02/1990-04/30/1994 FY94: \$0 TOTAL: \$438,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F ULABY HQ/G ASRAR 39-Env Sci, NEC
 HQ/T J PIEPER

NAGW 2199 University of Michigan - Ann Arbor 5278
 NAGW-2199/UNIV OF MICHIGAN/THEORETICAL AND EXPERIMENTAL
 MODELS OF THE DIFFUSE RADAR BACKSCATTER
Period *Obligations*
 08/14/1990-06/30/1994 FY94: \$0 TOTAL: \$110,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A W ENGLAND HQ/T A MAXWELL 32-Geological Sci

NAGW 2350 University of Michigan - Ann Arbor 5279
 STUDIES OF DYNAMIC PROCESSES RELATED TO ACTIVE EXPERIMENTS
 IN SPACE PLASMAS
Period *Obligations*
 02/11/1991-09/30/1992 FY94: \$0 TOTAL: \$110,254
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P M BANKS HQ/M M MELLOTT 13-Physics
 HQ/T PERRY

NAGW 2367 University of Michigan - Ann Arbor 5280
 NAGW-2367/UNIV MICHIGAN/HYDRODYNAMIC SIMULATIONS OF
 THE INTRACLUSTER MEDIUM
Period *Obligations*
 03/11/1991-06/30/1994 FY94: \$39,052 TOTAL: \$293,117
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A E EVRARD HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2398 University of Michigan - Ann Arbor 5281
 OZONE EXCITED STATES; PRODUCTION AND ATMOSPHERIC REACTIONS
Period *Obligations*
 03/18/1991-02/28/1994 FY94: \$57,000 TOTAL: \$170,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J R BARKER HQ/M J KURYLO 31-Atmos Sci
 HQ/R F HAMPSON

NAGW 2501 University of Michigan - Ann Arbor 5282
 NAGW-2501/UNIV MICHIGAN/PARTICIPATION AS A CO-INVESTIGATOR
 ON THE MARS 94 ELISMA INVESTIGATION
Period *Obligations*
 06/13/1991-12/31/1994 FY94: \$43,000 TOTAL: \$164,669
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L H BRACE HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2533 University of Michigan - Ann Arbor 5283
 MARS 94 INVESTIGATIONS
Period *Obligations*
 07/30/1991-01/31/1995 FY94: \$62,000 TOTAL: \$205,428
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A NAGY HQ/W L QUAIDE 31-Atmos Sci

NAGW 2561 University of Michigan - Ann Arbor 5284
 MARS '94 PARTICIPATING SCIENTIST: INVESTIGATION OF STABILITY
 OF THE MARTIAN ATMOSPHERE
Period *Obligations*
 07/31/1991-01/31/1995 FY94: \$40,003 TOTAL: \$147,773
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S K ATREYA HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2608 University of Michigan - Ann Arbor 5285
 PHOTO-BIOREACTOR ENGINEERING: LIGHT DELIVERY, AND ALGAL
 GROWTH AND GAS EXCHANGE
Period *Obligations*
 09/12/1991-07/14/1994 FY94: \$0 TOTAL: \$744,014
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B O PALSSON HQ/M M AVERNER 51-Biological Sci

NASA'S UNIVERSITY PROGRAM **MICHIGAN (Continued)**

NAGW 2802 University of Michigan - Ann Arbor 5286
 STAR FORMATION STUDIES: DYNAMICS AND INFRARED SIGN
 ATURES
Period Obligations
 01/03/1992-11/30/1994 FY94: \$95,680 TOTAL: \$232,746
Prin. Invest. NASA Tech. Officer CASE Category
 F C ADAMS HQ/L J CAROFF 11-Astronomy

NAGW 3962 University of Michigan - Ann Arbor 5294
 MULTIDIMENSIONAL MHD MODEL STUDIES OF THE IONOSPHE RES
 OF VENUS AND MARS
Period Obligations
 05/13/1994-03/31/1997 FY94: \$70,000 TOTAL: \$70,000
Prin. Invest. NASA Tech. Officer CASE Category
 A NAGY HQ/J BERGSTRALH 31-Atmos Sci

NAGW 3417 University of Michigan - Ann Arbor 5287
 STUDIES OF THE TENOUS PLANETARY ATMOSPHERES
Period Obligations
 03/09/1993-12/31/1994 FY94: \$85,000 TOTAL: \$159,931
Prin. Invest. NASA Tech. Officer CASE Category
 M COMBI HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 4009 University of Michigan - Ann Arbor 5295
 IUE OBSERVATION OF JOVIAN ATMOSPHERIC CHANGES RELA TED
 TO THE SHOEMAKER LEVY ENCOUNTER
Period Obligations
 05/23/1994-11/30/1994 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
 G E BALLESTER HQ/J H RAHE 11-Astronomy

NAGW 3423 University of Michigan - Ann Arbor 5288
 ANAL. AND INTRE. OF PION. VENUS LAR. PROBE NEUTRAL MASS
 SPECTROMETER DATA
Period Obligations
 03/01/1993-12/31/1994 FY94: \$61,500 TOTAL: \$117,365
Prin. Invest. NASA Tech. Officer CASE Category
 T M DONAHUE HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 4021 University of Michigan - Ann Arbor 5296
 MODELING OF MAGNETOSPHERIC THERMAL PLASMA PHENOMEN
 A WITH AN ADAPTIVE MHD METHOD
Period Obligations
 05/25/1994-02/28/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
 J U KOZYRA HQ/E C WHIPPLE 13-Physics
 HQ/J D BOHLIN

NAGW 3430 University of Michigan - Ann Arbor 5289
 LINKING GCM HYDROLOGIC PARAMETERS TO THE RADIOBRIG
 HTNESS OF NORTHERN PRAIRIE AND ARCTIC TUNDRA
Period Obligations
 03/03/1993-12/31/1994 FY94: \$100,000 TOTAL: \$200,000
Prin. Invest. NASA Tech. Officer CASE Category
 A W ENGLAND HQ/R E MURPHY 39-Env Sci, NEC

NAG10-69 University of Michigan - Ann Arbor 5297
 GRAVITROPIC RESPONSE MECHANISM IN CEREAL GRASS
 SHOOTs
Period Obligations
 02/12/1990-06/30/1993 FY94: \$0 TOTAL: \$165,019
Prin. Invest. NASA Tech. Officer CASE Category
 P KAUFMAN KSC/W M KNOTT 55-Agriculture Sci

NAGW 3457 University of Michigan - Ann Arbor 5290
 DATA ANALYSIS AND THEORETICAL STUDIES OF THE LOWER
 THERMOSPHERE
Period Obligations
 03/19/1993-02/28/1996 FY94: \$87,795 TOTAL: \$171,134
Prin. Invest. NASA Tech. Officer CASE Category
 T L KILLEEN HQ/M M MELLOTT 13-Physics
 HQ/G L WITHBROE

NAS 1-18290 University of Michigan - Ann Arbor 5298
 HALOE SCIENTIFIC INVESTIGATION
Period Obligations
 05/08/1986-08/31/1994 FY94: \$41,759 TOTAL: \$706,600
Prin. Invest. NASA Tech. Officer CASE Category
 S R DRAYSON LARC/E M SULLIVAN 31-Atmos Sci
 LARC/J M RUSSELL III

NAGW 3579 University of Michigan - Ann Arbor 5291
 INVESTIGATION OF THE IONOSPHERE AND IONOTAIL OF VE NUS
Period Obligations
 05/25/1993-03/14/1996 FY94: \$36,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 L BRACE HQ/J T BERGSTRALH 31-Atmos Sci

NAS 3-25812 University of Michigan - Ann Arbor 5299
 SCIENTIFIC SUPPORT FOR: POOL BOILING EXPERIMENT (PBE)
Period Obligations
 02/28/1990-12/31/1994 FY94: \$150,128 TOTAL: \$649,936
Prin. Invest. NASA Tech. Officer CASE Category
 H MERTE LERC/F P CHIARAMONTE 46-Mech Engr

NAGW 3585 University of Michigan - Ann Arbor 5292
 STUDIES FOR THE LOSS OF ATOMIC AND MOLECULAR SPECI ES
 FROM IO
Period Obligations
 05/12/1993-04/30/1996 FY94: \$34,214 TOTAL: \$66,677
Prin. Invest. NASA Tech. Officer CASE Category
 M COMB HQ/H C BRINTON 19-Phys Sci, NEC

NAS 3-26820 University of Michigan - Ann Arbor 5300
 CREEP RECOVERY OF NASA SIC FIBER RBSN COMPOSITES N RA
 91-LERC-1
Period Obligations
 10/30/1992-02/15/1994 FY94: \$0 TOTAL: \$115,498
Prin. Invest. NASA Tech. Officer CASE Category
 J W HOLMES LERC/R T BHATT 47-Materials Engr
 L W JONES

NAGW 3789 University of Michigan - Ann Arbor 5293
 GRAVITROPIC RESPONSE MECHANISM IN CEREAL GRASS
Period Obligations
 10/06/1993-06/30/1994 FY94: \$29,988 TOTAL: \$29,988
Prin. Invest. NASA Tech. Officer CASE Category
 P B KAUFMAN HQ/T W HALSTEAD 51-Biological Sci

NAS 3-27141 University of Michigan - Ann Arbor 5301
 INFLUENCE OF MICROSTRUCTURE ON THE ELEVATED TEMPER
 ATURE MECHANICAL BEHAVIOR OF FIBER-REINFORCED CERM
Period Obligations
 09/29/1993-04/17/1995 FY94: \$0 TOTAL: \$91,565
Prin. Invest. NASA Tech. Officer CASE Category
 J W HOLMES LERC/R T BHATT 47-Materials Engr

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NAS 5-27751 University of Michigan - Ann Arbor 5302
DESIGN, FABRICATE AND DELIVER A PROTOFLIGHT HIGH
RESOLUTION DOPPLER IMAGER FOR THE UARS
Period Obligations
09/26/1983-12/31/1994 FY94: \$1,282,993 TOTAL: \$34,951,325
Prin. Invest. NASA Tech. Officer CASE Category
P HAYS GSFC/G HONEYCUTT 31-Atmos Sci
GSFC/J DONLEY

NAS 5-30119 University of Michigan - Ann Arbor 5303
SCIENTIFIC INTERPRETATION OF GPMS DATA
Period Obligations
06/15/1987-04/30/1997 FY94: \$43,668 TOTAL: \$150,668
Prin. Invest. NASA Tech. Officer CASE Category
S K ATREYA GSFC/B NIEMANN 31-Atmos Sci

NAS 5-30120 University of Michigan - Ann Arbor 5304
SCIENTIFIC INTERPRETATION OF GPMS DATA
Period Obligations
06/15/1987-04/30/1994 FY94: \$76,000 TOTAL: \$133,000
Prin. Invest. NASA Tech. Officer CASE Category
T M DONAHUE GSFC/J R RICHARDS 31-Atmos Sci

NAS 5-30943 University of Michigan - Ann Arbor 5305
ELECTRONICS PACKAGE FOR THE COMET RENDEZVOUS ASTEROID
FLYBY NEUTRAL GAS ION MASS SPECTROMETER
Period Obligations
02/25/1991-08/31/1995 FY94: \$554,000 TOTAL: \$1,930,098
Prin. Invest. NASA Tech. Officer CASE Category
G CARIGNAN GSFC/R L FROST 31-Atmos Sci

NAS 5-30955 University of Michigan - Ann Arbor 5306
ELECTRONICS PACKAGE FOR THE HUYGENS PROBE; GAS
CHROMATOGRAPH MASS SPECTROMETER
Period Obligations
04/08/1991-09/30/1995 FY94: \$724,000 TOTAL: \$2,374,177
Prin. Invest. NASA Tech. Officer CASE Category
G CARIGNAN GSFC/R L FROST 31-Atmos Sci

NAS 5-32361 University of Michigan - Ann Arbor 5307
CASSINI/HUYGENS GAS CHROMATOGRAPH MASS SPECTROMETER
(GC-MS) INVESTIGATION
Period Obligations
05/05/1994-11/15/1997 FY94: \$45,000 TOTAL: \$45,000
Prin. Invest. NASA Tech. Officer CASE Category
S ATREYA GSFC/J RICHARDS 39-Env Sci, NEC

NAS 5-32570 University of Michigan - Ann Arbor 5308
TIMED DOPPLER INTERFEROMETER (TIDI) INVESTIGATION
Period Obligations
10/05/1993-10/30/1994 FY94: \$255,000 TOTAL: \$255,000
Prin. Invest. NASA Tech. Officer CASE Category
T L KILLEEN GSFC/G COLON 31-Atmos Sci
P B HAYES
R M JOHNSON

NAS 5-38096 University of Michigan - Ann Arbor 5309
TIMED TEMPERATURE, WIND, NEUTRALS AND IONS EXPERIMENT
(TWINNIE)
Period Obligations
02/23/1994-02/22/1995 FY94: \$27,000 TOTAL: \$27,000
Prin. Invest. NASA Tech. Officer CASE Category
G R CARIGNAN GSFC/F SCHMIDT 42-Astro Engr

NAS 8-37108 University of Michigan - Ann Arbor 5310
STUDY ENTITLED 'RESEARCH ON ORBITAL
PLASMA-ELECTRODYNAMICS (ROPE).'
Period Obligations
04/14/1987-09/30/1994 FY94: \$24,800 TOTAL: \$81,000
Prin. Invest. NASA Tech. Officer CASE Category
E G FONTHEIM MSFC/M F MALONE 31-Atmos Sci
MSFC/R HOLDER

NAS 8-38772 University of Michigan - Ann Arbor 5311
SUPPORT FOR SPACE EXPERIMENTS WIGH PARTICLE
ACCELERATORS
Period Obligations
11/27/1990-06/30/1994 FY94: \$0 TOTAL: \$581,263
Prin. Invest. NASA Tech. Officer CASE Category
P BANKS MSFC/D HIGGINS 13-Physics
T NUEBERT

NAS 8-39381 University of Michigan - Ann Arbor 5312
SHUTTLE ELECTRODYNAMIC TETHER SYSTEM
Period Obligations
06/26/1992-09/30/1994 FY94: \$1,157,000 TOTAL: \$2,318,131
Prin. Invest. NASA Tech. Officer CASE Category
P M BANKS MSFC/J H KERR 42-Astro Engr
B E GILHEHRST

NCA 2-521 University of Michigan - Ann Arbor 5313
CALCULATION OF REACTING HYPERSONIC FLOW FIELDS
Period Obligations
05/21/1990-04/30/1993 FY94: \$0 TOTAL: \$54,896
Prin. Invest. NASA Tech. Officer CASE Category
P L ROE ARC/H M YEE 42-Astro Engr
ARC/G S DEIWERT

NCA 2-653 University of Michigan - Ann Arbor 5314
CHARACTERIZATION OF SPIRAL PATCH ANTENNAS
Period Obligations
09/03/1991-11/30/1992 FY94: \$0 TOTAL: \$49,500
Prin. Invest. NASA Tech. Officer CASE Category
J L VOLAKIS ARC/A C WOO 45-Elec Engr

NCA 2-681 University of Michigan - Ann Arbor 5315
PRELIMINARY SYSTEM DESIGN FOR LOW ALTITUDE REMOTE Y
PILOTED AIRCRAFT
Period Obligations
01/21/1992-06/30/1993 FY94: \$0 TOTAL: \$15,265
Prin. Invest. NASA Tech. Officer CASE Category
J VESECKY ARC/P B RUSSELL 41-Aero Engr
J DAIDA

NCA 2-839 University of Michigan - Ann Arbor 5316
ANALYSIS OF CYLINDRICAL WRAP-AROUND AND DOUBLY CONFO
RMAL PATCH ANTENNAS VIA THE FINITE ELEMENT-ARTIFI
Period Obligations
08/25/1993-09/30/1994 FY94: \$0 TOTAL: \$29,000
Prin. Invest. NASA Tech. Officer CASE Category
J L VOLAKIS ARC/A C WOO 45-Elec Engr

NCC 2-517 University of Michigan - Ann Arbor 5317
FUSION OF ROBOTICS,ARTIFICIAL INTELLIGENCE,PERCEPTIAND
HUMAN SYSTEMS FOR ADVANCED SPACE MISSIONS
Period Obligations
11/01/1987-09/30/1993 FY94: \$0 TOTAL: \$1,158,403
Prin. Invest. NASA Tech. Officer CASE Category
R A VOLZ ARC/P E FRIEDLAND 22-Computer Science
J LAIRD ARC/P D LAIRD
L CONWAY

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NCC 2-573 University of Michigan - Ann Arbor 5318
 AUTONOMOUS VISUAL NAVIGATION SYSTEM FOR ROTORCRAFT S

Period	Obligations
12/15/1988-12/31/1993	FY94: \$0
Prin. Invest.	NASA Tech. Officer
N H MCCCLAMROCH	ARC/B SRIDHAR
	ARC/V H CHENG

 TOTAL: \$363,407
 CASE Category: 41-Aero Engr

NCC 2-856 University of Michigan - Ann Arbor 5319
 EFFECTS OF MICROGRAVITY ON DEVELOPMENT OF THIGH MU
 SCLES

Period	Obligations
05/25/1994-04/30/1995	FY94: \$121,195
Prin. Invest.	NASA Tech. Officer
K I CLARK	ARC/D A REISS-BUBENHEIM
K F BARALD	ARC/C M WINGET

 TOTAL: \$121,195
 CASE Category: 51-Biological Sci

NCC 3-76 University of Michigan - Ann Arbor 5320
 DEV. OF TOUGH NI AL-BASED ALLOYS AND COMPOSITE MATERIALS
 FOR HIGH TEMP. APP.

Period	Obligations
01/06/1987-12/31/1994	FY94: \$0
Prin. Invest.	NASA Tech. Officer
R GIBALA	LERC/R D NOEBE
	LERC/M V NATHAL

 TOTAL: \$147,610
 CASE Category: 47-Materials Engr

NCC 3-214 University of Michigan - Ann Arbor 5321
 FREE ENERGY SIMULATIONS OF SOLIDS USING EQUIVALEN T
 CRYSTAL THEORY POTENTIALS

Period	Obligations
05/10/1991-08/31/1993	FY94:
Prin. Invest.	NASA Tech. Officer
D J SROLOVITZ	LERC/J FERRANTE

 TOTAL: \$61,320
 CASE Category: 13-Physics

NCC 3-355 University of Michigan - Ann Arbor 5322
 FUNDAMENTALS OF MOLD-FREE CASTINGS EXPERIMENTAL AN D
 COMPUTATIONAL STUDIES

Period	Obligations
07/11/1994-07/10/1995	FY94: \$55,000
Prin. Invest.	NASA Tech. Officer
G TRYGGVASON	LERC/R ROGERS
S CECCIO	LERC/T GLASGOW

 TOTAL: \$55,000
 CASE Category: 47-Materials Engr

NGR23-5360 University of Michigan - Ann Arbor 5323
 A PROGRAM IN AERONOMY \$179,225

Period	Obligations
12/29/1969-05/31/1995	FY94: \$50,000
Prin. Invest.	NASA Tech. Officer
W E SHARP	GSFC/L J EARLY
	GSFC/R H PLESS

 TOTAL: \$4,428,984
 CASE Category: 13-Physics

NGT 00-010-023 University of Michigan - Ann Arbor 5324
 NGT-10023/UNIV MICHIGAN ANN ARBOR/MULTIDISCIPLINAR Y
 DESIGN AND ANALYSIS FELLOWSHIP PROGRAM

Period	Obligations
04/01/1994-12/31/1994	FY94: \$50,000
Prin. Invest.	NASA Tech. Officer
J G EISLEY	HQ/G S SEIDEL
	HQ/J R FACEY

 TOTAL: \$50,000
 CASE Category: 41-Aero Engr

NGT 00-030-103 University of Michigan - Ann Arbor 5325
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations
09/04/1992-08/31/1995	FY94: \$0
Prin. Invest.	NASA Tech. Officer
L L GEZON	HQ/G ASRAR
	HQ/D M BUTLER

 TOTAL: \$44,000
 CASE Category: 99-Multi-Discip

NGT 00-030-208 University of Michigan - Ann Arbor 5326
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations
08/27/1993-08/31/1995	FY94: \$22,000
Prin. Invest.	NASA Tech. Officer
W KUHN	HQ/D M BUTLER
	HQ/G ASRAR

 TOTAL: \$44,000
 CASE Category: 39-Env Sci, NEC

NGT 00-030-219 University of Michigan - Ann Arbor 5327
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations
09/30/1993-08/31/1996	FY94: \$22,000
Prin. Invest.	NASA Tech. Officer
P J SAMSON	HQ/G ASRAR
	HQ/D M BUTLER

 TOTAL: \$22,000
 CASE Category: 39-Env Sci, NEC

NGT 00-030-258 University of Michigan - Ann Arbor 5328
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations
09/21/1994-08/31/1995	FY94: \$22,000
Prin. Invest.	NASA Tech. Officer
J A TEERI	HQ/A C JANETOS
	HQ/G ASRAR

 TOTAL: \$22,000
 CASE Category: 39-Env Sci, NEC

NGT 00-040-007 University of Michigan - Ann Arbor 5329
 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM

Period	Obligations
10/18/1989-05/31/1995	FY94: \$380,000
Prin. Invest.	NASA Tech. Officer
J G ELSLEY	HQ/E T SCHWARTZ

 TOTAL: \$1,437,000
 CASE Category: 99-Multi-Discip

NGT 00-050-645 University of Michigan - Ann Arbor 5330
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
08/14/1990-04/30/1994	FY94: \$16,664
Prin. Invest.	NASA Tech. Officer
T KAMMASH	HQ/F C OWENS

 TOTAL: \$82,664
 CASE Category: 46-Mech Engr

NGT 00-050-713 University of Michigan - Ann Arbor 5331
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
07/01/1991-06/30/1994	FY94: \$3,250
Prin. Invest.	NASA Tech. Officer
P L ROE	HQ/F C OWENS

 TOTAL: \$66,000
 CASE Category: 42-Astro Engr

NGT 00-050-901 University of Michigan - Ann Arbor 5332
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
05/22/1992-06/30/1995	FY94: \$22,000
Prin. Invest.	NASA Tech. Officer
J N BREGMAN	HQ/J ALEXANDER

 TOTAL: \$66,000
 CASE Category: 11-Astronomy

NGT 00-050-928 University of Michigan - Ann Arbor 5333
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
05/13/1992-08/31/1995	FY94: \$22,000
Prin. Invest.	NASA Tech. Officer
H MERTE	HQ/J K ALEXANDER

 TOTAL: \$66,000
 CASE Category: 46-Mech Engr

NGT 00-050-931 University of Michigan - Ann Arbor 5334
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
08/17/1992-08/31/1994	FY94: \$0
Prin. Invest.	NASA Tech. Officer
P ROE	ARC/B HASTINGS

 TOTAL: \$44,000
 CASE Category: 41-Aero Engr

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NGT 00-050-977 University of Michigan - Ann Arbor 5335
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/24/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
 A M WAAS LARC/E J PRIOR 42-Astro Engr

NGT 00-051-256 University of Michigan - Ann Arbor 5344
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/17/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
 A M WAAS LARC/L EVANS 41-Aero Engr

NGT 00-051-057 University of Michigan - Ann Arbor 5336
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/25/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 J T HOLLAND JSC/S GOLDSTEIN 22-Computer Science

NGT 00-051-260 University of Michigan - Ann Arbor 5345
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/17/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
 T C ANDERSON LARC/L EVANS 41-Aero Engr

NGT 00-051-070 University of Michigan - Ann Arbor 5337
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/02/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 G TRYGGVASON HQ/D A HOLLAND 46-Mech Engr

NGT 00-051-323 University of Michigan - Ann Arbor 5346
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/06/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
 T I GOMBOSI HQ/D HOLLAND 13-Physics

NGT 00-051-120 University of Michigan - Ann Arbor 5338
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/09/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 D C MARTIN MSFC/F SIX 47-Materials Engr

NGT 00-051-335 University of Michigan - Ann Arbor 5347
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
 T I GOMBOSI HQ/D HOLLAND 31-Atmos Sci

NGT 00-051-126 University of Michigan - Ann Arbor 5339
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/13/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 E A RUNDENSTEINER HQ/D HOLLAND 22-Computer Science

NGT 00-090-207 University of Michigan - Ann Arbor 5348
 UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period Obligations
 09/14/1993-08/14/1995 FY94: \$12,000 TOTAL: \$24,000
Pnn. Invest. NASA Tech. Officer CASE Category
 S GREGERMAN HQ/D K RUSSELL 99-Multi-Discip

NGT 00-051-137 University of Michigan - Ann Arbor 5340
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/28/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 L KILLEEN HQ/D HOLLAND 33-Oceanography

NGT23-5802 University of Michigan - Ann Arbor 5349
 GSRP BASIC
Period Obligations
 06/01/1984-12/31/1993 FY94: \$0 TOTAL: \$1,010,857
Pnn. Invest. NASA Tech. Officer CASE Category
 D J WEINTRAUB HQ/F C OWENS 49-Engr, NEC

NGT 00-051-166 University of Michigan - Ann Arbor 5341
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/14/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 B E GILCHRIST MSFC/F SIX 45-Elec Engr

NAG 1-1175 Wayne State University 5350
 ACTIVE CONTROL OF PANEL VIBRATIONS INDUCED BY A
 BOUNDARY-LAYER FLOW
Period Obligations
 08/10/1990-10/31/1994 FY94: \$0 TOTAL: \$51,305
Pnn. Invest. NASA Tech. Officer CASE Category
 P L CHOW LARC/L MAESTRELLO 41-Aero Engr
 LARC/C A POWELL

NGT 00-051-180 University of Michigan - Ann Arbor 5342
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/02/1993-09/05/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
 J U KOZYRA MSFC/B SWINFORD 13-Physics

NAG 3-833 Wayne State University 5351
 RADIATION ALLOY MATERIALS STUDY
Period Obligations
 11/25/1987-03/31/1994 FY94: \$0 TOTAL: \$159,958
Pnn. Invest. NASA Tech. Officer CASE Category
 J R WOODYARD LERC/D J BRINKER 45-Elec Engr

NGT 00-051-235 University of Michigan - Ann Arbor 5343
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
 K G POWELL LERC/F MONTEGANI 41-Aero Engr

NAG 3-1140 Wayne State University 5352
 FUEL/AIR PROC IN MULTI-VENTURI-TUBE FUEL INJ FOR A DV GAS
 TURB APPL
Period Obligations
 02/12/1990-12/05/1994 FY94: \$80,860 TOTAL: \$415,874
Pnn. Invest. NASA Tech. Officer CASE Category
 M C LAI LERC/R R TACINA 41-Aero Engr

NASA'S UNIVERSITY PROGRAM
MICHIGAN (Continued)

NAG 3-1265 Wayne State University 5353
 MEASUREMENT AND MODELING OF SOOTING TURBULENT JET DIFFUSION FLAMES UNDER NORMAL AND REDUCED GRAVITY CONDITIONS
Period *Obligations*
 03/21/1991-02/22/1995 FY94: \$85,000 TOTAL: \$295,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J C KU LERC/P S GREENBERG 46-Mech Engr

NAG 3-1569 Wayne State University 5354
 LEWIS ADVANCED CLUSTER ENVIRONMENTAL SYSTEMS: PERFORMANCE ANALYSIS
Period *Obligations*
 02/14/1994-11/13/1994 FY94: \$41,053 TOTAL: \$41,053
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E YAPRAK LERC/G F FOLLEN 22-Computer Science

NAG 5-2098 Wayne State University 5355
 ESTIMATION OF NET CARBON FLUX OVER THE FIFE SITE USING GROUND AND SATELLITE DATA
Period *Obligations*
 09/15/1992-09/14/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N S GOEL GSFC/F G HALL 11-Astronomy
 J M NORMAN GSFC/P SELLEERS

NAG 5-2237 Wayne State University 5356
 BOREAL FOREST COMMUNITY COMPOSITION AND STRUCTURE, PHOTOSYNTHESIS, REMOTE SENSING, SCALING AND NET...
Period *Obligations*
 04/09/1993-04/14/1995 FY94: \$0 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N S GOEL GSFC/F G HALL 39-Env Sci, NEC
 GSFC/F SELLERS

NAGW 3260 Wayne State University 5357
 NAGW-3260/WAYNE STATE UNIV/ARCHITECTURALLY REALISTIC MODELS FOR OPTICAL RADIATION REGIME IN VEGETATION
Period *Obligations*
 11/27/1992-09/30/1994 FY94: \$0 TOTAL: \$203,039
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N S GOEL HQ/D E WICKLAND 39-Env Sci, NEC
 HQ/A C JANETOS

NGT 00-051-074 Wayne State University 5358
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 05/27/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R G REYNOLDS HQ/D HOLLAND 22-Computer Science

NAG 3-1668 Western Michigan University 5359
 REYNOLDS-AVERAGED NAVIER-STOKES STUDIES OF LOW REYNOLDS NUMBER EFFECT ON THE LOSSES IN A LOW-PRESSURE CHANNEL
Period *Obligations*
 09/23/1994-07/22/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D J DORNEY LERC/D E ASHPIS 41-Aero Engr

NAG 3-1669 Western Michigan University 5360
 COMPUTATIONAL SIMULATION OF THIN FILM HEAT FLUX GAUGE USING FLUENT
Period *Obligations*
 09/23/1994-03/22/1995 FY94: \$9,560 TOTAL: \$9,560
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C S CHO LERC/G C FRALICK 46-Mech Engr

NAG 3-1671 Western Michigan University 5361
 NUMERICAL SIMULATIONS OF UNSTEADY BLADE ROW INTERACTION IN MULTIPLE-STAGE TURBINES
Period *Obligations*
 09/26/1994-07/25/1995 FY94: \$23,198 TOTAL: \$23,198
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D J DORNEY LERC/J R SCHWAB 41-Aero Engr

NCC 2-493 Western Michigan University 5362
 DEVELOPMENT OF A LIGHT WEIGHT SELF-CONTAINED FLIGHT INSTRUMENTATION AND DATA ACQUISITION SYSTEM
Period *Obligations*
 09/01/1987-12/31/1993 FY94: \$0 TOTAL: \$478,844
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A W HOADLEY ARC/R K BOGUE 46-Mech Engr

MINNESOTA

NAG 8-1001 Augsburg College 5363
 JOVE
Period *Obligations*
 12/08/1993-05/31/1995 FY94: \$54,856 TOTAL: \$54,856
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 MSFC/F SIX 11-Astronomy

NAG 9-623 Bemidji State University 5364
 EFFECT OF RADIATIONS ON THE RODENT LENS EPITHELIUM
Period *Obligations*
 06/30/1992-09/01/1994 FY94: \$0 TOTAL: \$68,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A L LINDGREN JSC/C YANG 51-Biological Sci

NAG 5-2363 Mankato State University 5365
 FURTHER MODELS OF THE SPATIAL AND LUMINOSITY DISTRIBUTION OF BATSE GAMMA-RAY BURSTS
Period *Obligations*
 09/30/1993-09/30/1994 FY94: \$50,962 TOTAL: \$50,962
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J E HAKKILA GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NAG 8-192 Mankato State University 5366
 PROJECT JOVE
Period *Obligations*
 04/25/1991-06/14/1996 FY94: \$20,000 TOTAL: \$124,007
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J HAKKILA MSFC/F SIX 99-Multi-Discip
 H SHENG
 E BOYD

NAG 1-1254 Univ of Minnesota - Minneapolis-St Paul 5367
 VIBRATION ATTENUATION OF THE NASA LANGLEY EVOLUTIONARY STRUCTURE EXPERIMENT USING H AND STRUCTURED SILICON
Period *Obligations*
 05/03/1991-04/30/1995 FY94: \$31,622 TOTAL: \$150,622
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G J BALAS LARC/E S ARMSTRONG 42-Astro Engr

**NASA'S UNIVERSITY PROGRAM
MINNESOTA (Continued)**

NAG 1-1268 Univ of Minnesota - Minneapolis-St Paul 5368
MODELING INTERNAL RADIATIVE TRANSPORT IN CRYSTAL G
ROWTH PROCESSES
Period Obligations
04/19/1991-10/31/1993 FY94: \$1 TOTAL: \$130,000
Prin. Invest. NASA Tech. Officer CASE Category
J J DERBY LARC/I O CLARK 19-Phys Sci, NEC

NAG 1-1380 Univ of Minnesota - Minneapolis-St Paul 5369
FEEDBACK CONTROL LAWS FOR HIGHLY MANEUVERABLE
AIRCRAFT
Period Obligations
02/13/1992-01/31/1995 FY94: \$61,000 TOTAL: \$195,012
Prin. Invest. NASA Tech. Officer CASE Category
W L GARRARD LARC/B J BACON 41-Aero Engr
G BALAS

NAG 1-1470 Univ of Minnesota - Minneapolis-St Paul 5370
COMPUTATIONAL TECHNIQUES FOR FLOWS WITH FINITE- RATE
CONDENSATION
Period Obligations
12/17/1992-06/30/1994 FY94: \$0 TOTAL: \$36,700
Prin. Invest. NASA Tech. Officer CASE Category
G V CANDLER LARC/L R HUNT 41-Aero Engr

NAG 1-1498 Univ of Minnesota - Minneapolis-St Paul 5371
COMPUTATIONAL METHODS FOR THE SIMULATION OF HYPER-
SONIC RE-ENTRY FLOWS
Period Obligations
05/25/1993-06/15/1995 FY94: \$60,655 TOTAL: \$97,655
Prin. Invest. NASA Tech. Officer CASE Category
G V CANDLER LARC/K SUTTON 41-Aero Engr
LARC/P A GNOFFO

NAG 1-1605 Univ of Minnesota - Minneapolis-St Paul 5372
THE USE OF KIRCHHOFF'S METHOD IN JET AEROACOUSTICS
Period Obligations
02/23/1994-02/22/1995 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
A S LYRINTZIS LARC/K R MEADOWS 41-Aero Engr

NAG 2-880 Univ of Minnesota - Minneapolis-St Paul 5373
HIGH ENERGY DYNAMICS OF COMPLEX CHEMICAL PROCESSES
Period Obligations
01/19/1994-10/31/1994 FY94: \$55,000 TOTAL: \$55,000
Prin. Invest. NASA Tech. Officer CASE Category
D G TRUHLAR ARC/S R LANGHOFF 12-Chemistry

NAG 2-904 Univ of Minnesota - Minneapolis-St Paul 5374
ROBUST PRECONDITIONED ITERATIVE TECHNIQUES FOR CFE
APPLICATIONS
Period Obligations
05/25/1994-06/30/1995 FY94: \$90,124 TOTAL: \$90,124
Prin. Invest. NASA Tech. Officer CASE Category
Y SAAD ARC/T A LASINSKI 22-Computer Science

NAG 3-598 Univ of Minnesota - Minneapolis-St Paul 5375
INVTGN OF HEAT TRSFANDHYDRODYNAMIC IN OSCILLATING
FLOWS WITH APPLICATION TO STIRLING ENGINE CMPNTS
Period Obligations
12/27/1984-12/29/1993 FY94: TOTAL: \$379,994
Prin. Invest. NASA Tech. Officer CASE Category
T W SIMON LERC/J DUDENHOEFER 13-Physics
J SEUME LERC/R TEW

NAG 3-1024 Univ of Minnesota - Minneapolis-St Paul 5376
NUMERICAL PREDICTION OF THE FLUID FLOW AND HEAT TRAN
SFER IN TRANSITIONAL AND TURBULENT OSCILLATORY FLOW
Period Obligations
03/20/1989-12/22/1993 FY94: \$0 TOTAL: \$195,650
Prin. Invest. NASA Tech. Officer CASE Category
S V PATANKAR LERC/R C TEW 49-Engr, NEC
LERC/J E DUDENHOEFER

NAG 3-1249 Univ of Minnesota - Minneapolis-St Paul 5377
MEASUREMENTS IN A TRANSITIONAL BOUNDARY LAYER ON A
CONCAVE SURFACE
Period Obligations
03/01/1991-03/28/1995 FY94: \$65,000 TOTAL: \$245,000
Prin. Invest. NASA Tech. Officer CASE Category
T W SIMON LERC/F F SIMON 46-Mech Engr

NAG 3-1332 Univ of Minnesota - Minneapolis-St Paul 5378
ARC CATHODE ATTACHMENT STUDY
Period Obligations
02/27/1992-12/31/1994 FY94: \$50,000 TOTAL: \$115,000
Prin. Invest. NASA Tech. Officer CASE Category
J V HEBERLEIN LERC/C J SARMIENTO 46-Mech Engr
HQ/F M CURRAN

NAG 3-1638 Univ of Minnesota - Minneapolis-St Paul 5379
FILM COOLING WITH ANISOTROPIC DIFFUSION AND HOLE E NTRY
EFFECTS: EXPERIMENTS AND COMPUTATION
Period Obligations
07/01/1994-06/30/1995 FY94: \$40,165 TOTAL: \$40,165
Prin. Invest. NASA Tech. Officer CASE Category
S V PATANKAR LERC/J R SCHWAB 41-Aero Engr
T W SIMON

NAG 5-529 Univ of Minnesota - Minneapolis-St Paul 5380
DYNAMICS EXPLORER MAGNETOMETER EXPERIMENT
Period Obligations
04/01/1985-03/31/1993 FY94: \$0 TOTAL: \$239,858
Prin. Invest. NASA Tech. Officer CASE Category
L J CAHILL GSFC/G D BULLOCK 19-Phys Sci, NEC
GSFC/R A HOFFMAN

NAG 5-1768 Univ of Minnesota - Minneapolis-St Paul 5381
THE CARBON ABUNDANCE IN SBS 0335-052 AND THE TIME
EVOLUTION OF C/O
Period Obligations
09/13/1991-09/14/1993 FY94: \$0 TOTAL: \$6,000
Prin. Invest. NASA Tech. Officer CASE Category
E D SKILLMAN GSFC/D WEST 11-Astronomy

NAG 5-1846 Univ of Minnesota - Minneapolis-St Paul 5382
ASSESSING THE POTENTIAL IMPACT OF GLOBAL CLIMATE C
HANGES ON SOILS AS SINK OR SOURCE OF
Period Obligations
12/10/1991-06/14/1993 FY94: \$0 TOTAL: \$67,500
Prin. Invest. NASA Tech. Officer CASE Category
H H CHENG GSFC/L S WALTER 11-Astronomy

NAG 5-2108 Univ of Minnesota - Minneapolis-St Paul 5383
DEVELOPMENT OF A GENERALIZED FRAMEWORK FOR IDENTIF
YING AND STUDYING SCALE INVARIANT RELATIONSHIPS..
Period Obligations
10/08/1992-10/14/1994 FY94: \$85,000 TOTAL: \$170,450
Prin. Invest. NASA Tech. Officer CASE Category
E GSFC/R F CAHALAN 31-Atmos Sci
FOUFOULA-GEORGIU

**NASA'S UNIVERSITY PROGRAM
MINNESOTA (Continued)**

NAG 5-2581 Univ of Minnesota - Minneapolis-St Paul 5384
ANOMALOUS A TYPE SUPERGIANTS IN THE MAGELLANIC CLO
UDS

Period	Obligations	
04/21/1994-04/30/1995	FY94: \$13,753	TOTAL: \$13,753
Prin. Invest.	NASA Tech. Officer	CASE Category
R M HUMPHREYS	GSFC/D WEST	11-Astronomy

NAGW 1431 Univ of Minnesota - Minneapolis-St Paul 5392
SATELLITE INVENTORY OF MINNESOTA FOREST RESOURCES

Period	Obligations	
09/02/1988-12/31/1992	FY94: \$0	TOTAL: \$496,093
Prin. Invest.	NASA Tech. Officer	CASE Category
M E BAUER	HQ/W HUNTRESS	39-Env Sci, NEC
	HQ/S G TILFORD	

NAG 5-2698 Univ of Minnesota - Minneapolis-St Paul 5385
ENHANCED ACCESS FOR FOREST MANAGEMENT PLANNING

Period	Obligations	
08/25/1994-08/31/1995	FY94: \$52,000	TOTAL: \$52,000
Prin. Invest.	NASA Tech. Officer	CASE Category
T E BURK	GSFC/F HASLER	39-Env Sci, NEC

NAGW 1584 Univ of Minnesota - Minneapolis-St Paul 5393
CONVECTION ALGORITHMS FOR MULTIPROCESSING
SUPERCONDUCTORS

Period	Obligations	
12/28/1988-02/28/1994	FY94: \$0	TOTAL: \$238,614
Prin. Invest.	NASA Tech. Officer	CASE Category
D A YUEN	HQ/J K ALEXANDER	22-Computer Science
	HQ/D A HOLLAND	

NAG 8-855 Univ of Minnesota - Minneapolis-St Paul 5386
ASSEMBLY AND OPERATIONS ANALYSIS OF LUNAR TELESCOPE

Period	Obligations	
10/11/1990-07/01/1993	FY94: \$0	TOTAL: \$31,945
Prin. Invest.	NASA Tech. Officer	CASE Category
W L GARRARD	MSFC/M E NEIN	11-Astronomy
A VANO		

NAGW 1957 Univ of Minnesota - Minneapolis-St Paul 5394
GEOPHYSICAL AND GEODYNAMICAL INVESTIGATIONS BASED ON
LAGEO II SATELLITE DATA

Period	Obligations	
04/23/1990-03/31/1994	FY94: \$0	TOTAL: \$220,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D A YUEN	HQ/M BALTUCK	32-Geological Sci

NAG 9-60 Univ of Minnesota - Minneapolis-St Paul 5387
RARE GAS STUDIES ON LUNAR MATERIALS

Period	Obligations	
02/01/1983-03/01/1994	FY94: \$0	TOTAL: \$1,549,204
Prin. Invest.	NASA Tech. Officer	CASE Category
R O PEPIN	JSC/I D BROWNE	19-Phys Sci, NEC

NAGW 2004 Univ of Minnesota - Minneapolis-St Paul 5395
STUDIES OF ULTRA HEAVY COSMIC RAY NUCLEI

Period	Obligations	
05/29/1990-11/30/1994	FY94: \$91,998	TOTAL: \$490,944
Prin. Invest.	NASA Tech. Officer	CASE Category
C J WADDINGTON	HQ/W V JONES	13-Physics
	HQ/J C LING	

NAG 9-110 Univ of Minnesota - Minneapolis-St Paul 5388
ANOMALOUS ISOTOPIC ABUNDANCES IN EXTRATE

Period	Obligations	
04/23/1985-04/01/1994	FY94: \$0	TOTAL: \$338,312
Prin. Invest.	NASA Tech. Officer	CASE Category
A O NIER	JSC/I D BROWNE	47-Materials Engr

NAGW 2324 Univ of Minnesota - Minneapolis-St Paul 5396
INFRARED PHOTOMETRY AND SPECTROSCOPY OF BRIGHT COM
ETS

Period	Obligations	
12/11/1990-05/31/1994	FY94: \$52,794	TOTAL: \$207,800
Prin. Invest.	NASA Tech. Officer	CASE Category
R G GEHRZ	HQ/J H RAHE	11-Astronomy

NAG 9-449 Univ of Minnesota - Minneapolis-St Paul 5389
FINITE ELEMENT METHODOLOGY OF DEVEL COMPRESSIBLE
FLOWS

Period	Obligations	
08/01/1990-08/01/1994	FY94: \$0	TOTAL: \$81,814
Prin. Invest.	NASA Tech. Officer	CASE Category
T TEZDYUAR	JSC/C LI	29-Math/Computer, NEC

NAGW 2466 Univ of Minnesota - Minneapolis-St Paul 5397
MASS SPECTROMETER DEVELOPMENT FOR MOLECULAR ELEME
NTAL AND ISOTOPIC ANALYSIS AT THE SURFACE OF MARS

Period	Obligations	
06/13/1991-06/30/1994	FY94: \$0	TOTAL: \$142,423
Prin. Invest.	NASA Tech. Officer	CASE Category
K MAUERSBERGER	HQ/W L QUAIDE	19-Phys Sci, NEC

NAG 9-534 Univ of Minnesota - Minneapolis-St Paul 5390
LUNAR SIMULANT DEVELOPMENT

Period	Obligations	
09/10/1991-04/01/1993	FY94: \$0	TOTAL: \$30,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P WEIBLEN	JSC/D S MCDAY	32-Geological Sci

NAGW 2548 Univ of Minnesota - Minneapolis-St Paul 5398
NAGW-2548/UNIV MINNESOTA/NUMERICAL SIMULATION OF COSMIC
RAY ACCELERATION IN SHOCKS

Period	Obligations	
06/13/1991-02/28/1995	FY94: \$30,000	TOTAL: \$120,863
Prin. Invest.	NASA Tech. Officer	CASE Category
T W JONES	HQ/W V JONES	13-Physics
	HQ/J C LING	

NAGW 800 Univ of Minnesota - Minneapolis-St Paul 5391
KINETICS AND MECHANISMS OF STRATOSPHERIC CHLORINE
RELEASE FROM CHLOROFLOUROMETHYL SPECIES

Period	Obligations	
09/01/1985-01/31/1995	FY94: \$93,441	TOTAL: \$831,810
Prin. Invest.	NASA Tech. Officer	CASE Category
R W CARR	HQ/M J KURYLO	31-Atmos Sci
	HQ/R F HAMPSON	

NAGW 2653 Univ of Minnesota - Minneapolis-St Paul 5399
STUDY OF TIME-DEPENDENT MAGNETOSPHERE/IONOSPHERE C
OUPLING ON INTERMEDIATE AND SMALL SCALES

Period	Obligations	
07/15/1991-04/30/1997	FY94: \$64,232	TOTAL: \$224,631
Prin. Invest.	NASA Tech. Officer	CASE Category
R L LYSACK	HQ/M M MELLOTT	11-Astronomy
	HQ/J D BOHLIN	

NASA'S UNIVERSITY PROGRAM **MINNESOTA (Continued)**

NAGW 2690 Univ of Minnesota - Minneapolis-St Paul 5400 **A THEORETICAL STUDY OF MACROSCOPIC COLLECTIVE ENTR Y** **OF SOLAR WIND ENERGY AND MOMENTUM**

Period	Obligations	
08/22/1991-05/31/1994	FY94: \$0	TOTAL: \$163,154
Prin. Invest.	NASA Tech. Officer	CASE Category
R L LYSAK	HQ/M M MELLOTT	13-Physics
	HQ/J D BOHLIN	

NAGW 3014 Univ of Minnesota - Minneapolis-St Paul 5401 **DETECTION AND INTERACTIONS OF ULTRA HEAVY NUCLEI A ND** **COSMIC RAY PROPAGATION**

Period	Obligations	
04/03/1992-02/28/1995	FY94: \$51,345	TOTAL: \$165,717
Prin. Invest.	NASA Tech. Officer	CASE Category
C J WADDINGTON	HQ/W V JONES	13-Physics
	HQ/J D BOHLIN	

NAGW 3102 Univ of Minnesota - Minneapolis-St Paul 5402 **PHYSICAL PROPERTIES OF PARTIALLY MOLTEN AMMONIA WA TER** **ICE PERMEABILITY AND RHEOLOGY**

Period	Obligations	
06/17/1992-03/31/1995	FY94: \$30,299	TOTAL: \$89,599
Prin. Invest.	NASA Tech. Officer	CASE Category
D L KOHISTEDT	HQ/J M BOYCE	32-Geological Sci

NAGW 3189 Univ of Minnesota - Minneapolis-St Paul 5403 **NAGW-3189/UNIV MINNESOTA/RELATIVE ABUNDANCE AND STAR** **FORMATION HISTORIES OF DWARF GALAXIES**

Period	Obligations	
08/19/1992-07/31/1994	FY94: \$0	TOTAL: \$167,202
Prin. Invest.	NASA Tech. Officer	CASE Category
E D SKILLMAN	HQ/G R RIEGLER	11-Astronomy

NAGW 3324 Univ of Minnesota - Minneapolis-St Paul 5404 **THE CONDENSATE FRACTION IN SUPERFLUID HELIUM DROPL ETS**

Period	Obligations	
01/13/1993-12/31/1995	FY94: \$90,000	TOTAL: \$180,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J W HALEY	HQ/C RAY	13-Physics

NAGW 3336 Univ of Minnesota - Minneapolis-St Paul 5405 **RARE GAS AND NITROGEN STUDIES ON LUNAR, METEORITIC ,** **AND SELECTED TERRESTRIAL MATERIALS**

Period	Obligations	
01/13/1993-12/14/1994	FY94: \$0	TOTAL: \$183,961
Prin. Invest.	NASA Tech. Officer	CASE Category
R O PEPIN	HQ/H C BRINTON	13-Physics

NAGW 3610 Univ of Minnesota - Minneapolis-St Paul 5406 **ANOMALOUS ISOTOPIC ABUNDANCES IN EXTRATERRESTRIAL MAT**

Period	Obligations	
05/21/1993-03/31/1995	FY94: \$48,295	TOTAL: \$99,132
Prin. Invest.	NASA Tech. Officer	CASE Category
A NIER	HQ/J BOYCE	32-Geological Sci

NAGW 3751 Univ of Minnesota - Minneapolis-St Paul 5407 **AN EXPERIMENTAL STUDY OF ATMOSPHERIC HOMOGENEOUS N** **UCLEATION**

Period	Obligations	
09/23/1993-05/31/1996	FY94: \$40,989	TOTAL: \$88,640
Prin. Invest.	NASA Tech. Officer	CASE Category
P M MCMURRY	HQ/J A KAYE	31-Atmos Sci
	HQ/A C JANETOS	

NAS 5-31219 Univ of Minnesota - Minneapolis-St Paul 5408 **SCIENTIFIC AND ENGINEERING SUPPORT FOR THE ULYSSES/ STO** **INSTRUMENT**

Period	Obligations	
06/06/1991-09/30/1995	FY94: \$0	TOTAL: \$1,117,200
Prin. Invest.	NASA Tech. Officer	CASE Category
K GEOTZ	GSFC/B KLEIN	11-Astronomy
P KELLOGG	GSFC/R STONE	

NAS 5-32454 Univ of Minnesota - Minneapolis-St Paul 5409 **MAGNETIC MASS SPECTROMETERS**

Period	Obligations	
03/04/1993-05/01/1995	FY94: \$162,500	TOTAL: \$647,500
Prin. Invest.	NASA Tech. Officer	CASE Category
K MAUERSBERGER	GSFC/S BENNER	13-Physics

NAS 5-32670 Univ of Minnesota - Minneapolis-St Paul 5410 **INCORPORATING THE APS CATALOG OF THE POSS I AND IMAGE** **ARCHIVE IN ADS**

Period	Obligations	
08/08/1994-09/08/1996	FY94: \$73,989	TOTAL: \$73,989
Prin. Invest.	NASA Tech. Officer	CASE Category
R HUMPHREYS	GSFC/D WEST	42-Astro Engr

NAS 5-33048 Univ of Minnesota - Minneapolis-St Paul 5411 **RADIO AND PLASMA WAVE EXPERIMENT**

Period	Obligations	
03/15/1990-07/15/1993	FY94: \$328,000	TOTAL: \$3,264,566
Prin. Invest.	NASA Tech. Officer	CASE Category
P KELLOG	GSFC/M L KAISER	42-Astro Engr
K GOETZ		

NCC 2-809 Univ of Minnesota - Minneapolis-St Paul 5412 **OPTIMAL TAKEOFF PROCEDURES FOR A CATEGORY A HELICO** **PTERS**

Period	Obligations	
07/08/1993-07/14/1995	FY94: \$100,127	TOTAL: \$115,127
Prin. Invest.	NASA Tech. Officer	CASE Category
Y ZHAO	ARC/R T CHEN	41-Aero Engr

NCC 2-868 Univ of Minnesota - Minneapolis-St Paul 5413 **STUDIES**

Period	Obligations	
07/11/1994-06/14/1995	FY94: \$74,364	TOTAL: \$74,364
Prin. Invest.	NASA Tech. Officer	CASE Category
Y ZHAO	ARC/R A SLATTERY	41-Aero Engr
	ARC/V H CHENG	

NCC 2-5017 Univ of Minnesota - Minneapolis-St Paul 5414 **AEROACOUSTICS OF TURBULENT HIGH-SPEED JETS**

Period	Obligations	
11/30/1993-12/31/1995	FY94: \$23,546	TOTAL: \$23,546
Prin. Invest.	NASA Tech. Officer	CASE Category
T S LUNDGREN	ARC/N N MANSOUR	41-Aero Engr

NCC 3-238 Univ of Minnesota - Minneapolis-St Paul 5415 **COMPUTATION OF RADIATION HEAT TRANSFER IN AEROENGI NE** **COMBUSTORS**

Period	Obligations	
12/20/1991-03/27/1995	FY94: \$99,865	TOTAL: \$299,464
Prin. Invest.	NASA Tech. Officer	CASE Category
S V PATANKAR	LERC/H S LEE	41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
MINNESOTA (Continued)**

NGT 00-030-017 Univ of Minnesota - Minneapolis-St Paul 5416

NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
11/09/1990-02/28/1994	FY94: \$0	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A M BRAUNSCHWEIG	HQ/G ASRAR	39-Env Sci, NEC

NGT 00-030-052 Univ of Minnesota - Minneapolis-St Paul 5417

NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/09/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J J MARTI	HQ/D M BUTLER	31-Atmos Sci
K MAUERSBERGER	HQ/G S WILSON	

NGT 00-030-055 Univ of Minnesota - Minneapolis-St Paul 5418

NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
09/17/1991-08/31/1993	FY94: \$0	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P KUMAR	HQ/D M BUTLER	39-Env Sci, NEC
E F GEORGIOU	HQ/G S WILSON	

NGT 00-030-111 Univ of Minnesota - Minneapolis-St Paul 5419

NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
10/30/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R J WEBER	HQ/G ASRAR	99-Multi-Discip
	HQ/D M BUTLER	

NGT 00-030-213 Univ of Minnesota - Minneapolis-St Paul 5420

NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

Period	Obligations	
08/26/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
E F GEORGIOU	HQ/G ASRAR	39-Env Sci, NEC
	HQ/D M BUTLER	

NGT 00-040-027 Univ of Minnesota - Minneapolis-St Paul 5421

NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM

Period	Obligations	
04/03/1991-02/28/1995	FY94: \$205,000	TOTAL: \$733,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P W WEBLER	HQ/E T SCHWARTZ	99-Multi-Discip

NGT 00-050-421 Univ of Minnesota - Minneapolis-St Paul 5422

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/31/1989-08/31/1994	FY94: \$0	TOTAL: \$70,000
Prin. Invest.	NASA Tech. Officer	CASE Category
S BANERJEE	HQ/F C OWENS	19-Phys Sci, NEC

NGT 00-050-563 Univ of Minnesota - Minneapolis-St Paul 5423

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/29/1990-06/30/1993	FY94: \$0	TOTAL: \$58,792
Prin. Invest.	NASA Tech. Officer	CASE Category
A BEITZ	HQ/F C OWENS	56-Medical Sciences

NGT 00-050-684 Univ of Minnesota - Minneapolis-St Paul 5424

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/17/1990-06/30/1993	FY94: \$0	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P J KELLOGG	HQ/F C OWENS	13-Physics

NGT 00-050-785 Univ of Minnesota - Minneapolis-St Paul 5425

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
05/10/1991-12/31/1994	FY94: \$0	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J V CARLIS	HQ/F C OWENS	22-Computer Science
L BARNETT		

NGT 00-050-830 Univ of Minnesota - Minneapolis-St Paul 5426

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/02/1991-12/31/1994	FY94: \$0	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
E P FENDER	HQ/F C OWENS	46-Mech Engr
J HEBERLEIN		

NGT 00-051-090 Univ of Minnesota - Minneapolis-St Paul 5427

GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
05/17/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J W HALLEY	HQ/B CARPENTER	13-Physics

NGT 00-051-169 Univ of Minnesota - Minneapolis-St Paul 5428

GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/29/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
A LYNNTZIS	ARC/M MOORE	41-Aero Engr

NGT 00-051-296 Univ of Minnesota - Minneapolis-St Paul 5429

GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/28/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R D GEHRZ	HQ/D HOLLAND	11-Astronomy

NGT 00-051-334 Univ of Minnesota - Minneapolis-St Paul 5430

GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/08/1994-09/14/1997	FY94: \$22,000	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
E D SKILLMAN	HQ/D HOLLAND	11-Astronomy

NGT 00-051-359 Univ of Minnesota - Minneapolis-St Paul 5431

GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/22/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J W HALLEY	HQ/G A LESANE	13-Physics

NSG-1431 Univ of Minnesota - Minneapolis-St Paul 5432

NEUTRAL CONSTITUENT MEASUREMENTS IN THE STRATOSPHERE

Period	Obligations	
06/23/1977-04/30/1995	FY94: \$0	TOTAL: \$2,643,191
Prin. Invest.	NASA Tech. Officer	CASE Category
K MAUERSBERGER	LARC/A G BESWICK	31-Atmos Sci
A O NIER		

NASA'S UNIVERSITY PROGRAM
MINNESOTA (Continued)

NAG 3-1367 University of Minnesota-Duluth 5433
 I COME HERE TO LEARN: RECRUITMENT AND RETENTION OF MINORITIES IN SCIENCE, MATHEMATICS, AND ENGINEERING

Period	Obligations	
09/17/1992-09/26/1994	FY94: \$0	TOTAL: \$181,089
Prin. Invest.	NASA Tech. Officer	CASE Category
T B HOLST	LERC/R ROMERO	99-Multi-Discip
	LERC/R F LAWRENCE	

NCA 2-819 University of Minnesota-Duluth 5434
 A HYBRID COMPUTATIONAL METHODOLOGY FOR HYPERSONIC TRANSITIONAL FLOWS: CONTINUUM FORMULATION

Period	Obligations	
06/03/1993-05/31/1995	FY94: \$20,000	TOTAL: \$59,965
Prin. Invest.	NASA Tech. Officer	CASE Category
G V CANDLER	ARC/G S DEIWERT	41-Aero Engr

MISSISSIPPI

NAGW 4092 Jackson State University 5435
 PRE-ENGINEERING (9TH GRADE) MINORITY TRAINING SUMMER PROGRAM

Period	Obligations	
07/28/1994-02/28/1995	FY94: \$33,487	TOTAL: \$33,487
Prin. Invest.	NASA Tech. Officer	CASE Category
A K MOHAMED	HQ/B L WHITE	49-Engr, NEC

NGT 00-090-034 Jackson State University 5436
 YOUNG SCIENTIST PROGRAM

Period	Obligations	
09/25/1990-06/30/1995	FY94: \$91,606	TOTAL: \$428,457
Prin. Invest.	NASA Tech. Officer	CASE Category
R SULLIVAN	HQ/M MARGOLIS	99-Multi-Discip
W LUPTON		

NAG 1-226 Mississippi State University 5437
 TRANSONIC VISCOUS-INVISID INTERACTION USING EULER AND INVERSE BOUNDARY-LAYER EQUATIONS

Period	Obligations	
10/27/1981-02/28/1995	FY94: \$0	TOTAL: \$397,334
Prin. Invest.	NASA Tech. Officer	CASE Category
D L WHITFIELD	LARC/F C THAMES	41-Aero Engr
	LARC/J W EDWARDS	

NAG 1-1271 Mississippi State University 5438
 ANALYSIS OF METHODS FOR REDUCTION OF INDUCED DRAG

Period	Obligations	
05/03/1991-01/31/1994	FY94:	TOTAL: \$129,146
Prin. Invest.	NASA Tech. Officer	CASE Category
M J JANUS	LARC/D W BARTLETT	41-Aero Engr
	LARC/P C ARCARA JR.	

NAG 1-1369 Mississippi State University 5439
 AERODYNAMIC CALCULATIONS FOR SHOCK NOISE PREDICTION

Period	Obligations	
01/15/1992-07/09/1994	FY94: \$25,000	TOTAL: \$100,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D L WHITFIELD	LARC/J W POSEY	41-Aero Engr
	LARC/F FARASSAT	

NAG 1-1571 Mississippi State University 5440
 WING DESIGN FOR A CIVIL TILTROTOR TRANSPORT AIRCRAFT

Period	Obligations	
01/25/1994-01/24/1995	FY94: \$25,455	TOTAL: \$25,455
Prin. Invest.	NASA Tech. Officer	CASE Category
M RAIS-ROHANI	LARC/D J BAKER	41-Aero Engr
	LARC/J H STARNES	

NAG 2-824 Mississippi State University 5441
 GRID GENERATION FIELD INTERPRETATION AND FIELD SOLUTION IN A TIGHTLY INTEGRATED DISTRIBUTED ...

Period	Obligations	
02/26/1993-02/28/1995	FY94: \$100,000	TOTAL: \$200,000
Prin. Invest.	NASA Tech. Officer	CASE Category
M L STOKES	ARC/T A LASINSKI	22-Computer Science
	ARC/LEVIT	

NAG 3-767 Mississippi State University 5442
 3-D UNSTEADY EULER SOLUTIONS FOR INTERACTING BLADE ROWS

Period	Obligations	
12/08/1986-12/16/1994	FY94: \$50,000	TOTAL: \$390,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D L WHITFIELD	LERC/D HOYNIK	41-Aero Engr
	LERC/D L HUFF	

NAG 3-869 Mississippi State University 5443
 COMPUTATION OF ROTOR STATOR INTERACTION USING THE NAVIER-STOKES EQUATIONS

Period	Obligations	
01/20/1988-02/27/1995	FY94: \$98,364	TOTAL: \$473,364
Prin. Invest.	NASA Tech. Officer	CASE Category
D WHITFIELD	LERC/J M SANZ	41-Aero Engr

NAG 3-983 Mississippi State University 5444
 COMPUTATIONAL FLUID DYNAMICS FOR AEROLASTIC ANALYSIS

Period	Obligations	
01/17/1989-01/09/1995	FY94: \$45,000	TOTAL: \$287,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D L WHITFIELD	LERC/G L STEFKO	41-Aero Engr
T SWAFFORD	LERC/L J KIRALY	

NAG 3-1228 Mississippi State University 5445
 INTERACTIVE GRID SYSTEMS FOR TURBOMACHINERY APPLICATION

Period	Obligations	
12/12/1990-01/30/1995	FY94: \$50,000	TOTAL: \$195,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J M JANUS	LERC/D L HUFF	41-Aero Engr
B K SONI		

NAG 3-1357 Mississippi State University 5446
 NUMERICAL SIMULATION OF VISCOUS INCOMPRESSIBLE FLOW IN PUMPS AND IMPELLERS

Period	Obligations	
10/06/1992-01/11/1995	FY94: \$45,000	TOTAL: \$90,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D L WHITFIELD	LERC/J P VERES	41-Aero Engr

NAG 5-2006 Mississippi State University 5447
 AN INVESTIGATION OF ERROR CHARACTERISTICS AND CODE PERFORMANCE

Period	Obligations	
07/01/1992-06/30/1995	FY94: \$35,000	TOTAL: \$138,700
Prin. Invest.	NASA Tech. Officer	CASE Category
W J EBEL	GSFC/W H MILLER	49-Engr, NEC
F M INGELS	GSFC/R M MULLER	

NASA'S UNIVERSITY PROGRAM
MISSISSIPPI (Continued)

NAG 8-866		Mississippi State University		5448
AN INVESTIGATION OF NETWORKING TECHNIQUES FOR THE ASRM FACILITY				
<i>Period</i>		<i>Obligations</i>		
02/06/1991-05/06/1994		FY94: \$0		TOTAL: \$235,687
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
R J MOORHEAD		MSFC/G L SETTLE		45-Elec Engr
W D SMITH		MSFC/W W ROBINSON		
F M INGELS				

NAG 8-936		Mississippi State University		5449
R/S CARBON COMPOSITE MATERIALS TEST				
<i>Period</i>		<i>Obligations</i>		
09/17/1992-09/30/1994		FY94: \$119,999		TOTAL: \$198,093
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
W B HALL		MSFC/C G UPTON		43-Chem Engr
		MSFC/M L STUCKER		

NAG 8-965		Mississippi State University		5450
PROTEIN RESEARCH				
<i>Period</i>		<i>Obligations</i>		
06/15/1993-07/01/1995		FY94: \$110,000		TOTAL: \$220,000
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
W WILSON		MSFC/D CARTER		19-Phys Sci, NEC

NAG 8-1012		Mississippi State University		5451
INVESTIGATION OF TEMPORAL DECOMPOSITION IN PAYLOAD EXPERIMENT SCHEDULING				
<i>Period</i>		<i>Obligations</i>		
09/14/1993-06/30/1994		FY94: \$0		TOTAL: \$24,829
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
S BALLINGTON		MSFC/B GUYNES		29-Math/Cmputer,NEC

NAG 8-1022		Mississippi State University		5452
AN ANALYSIS OF BASE GAMMA-RAY BURST TIME PROFILES				
<i>Period</i>		<i>Obligations</i>		
02/11/1994-02/10/1995		FY94: \$28,000		TOTAL: \$28,000
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
P LESTRADE		MSFC/G J FISHMAN		31-Atmos Sci

NAG 9-624		Mississippi State University		5453
NASA-HBCU SCIENCE AND ENGINEERING INITIATIVE				
<i>Period</i>		<i>Obligations</i>		
07/10/1992-09/30/1993		FY94: \$0		TOTAL: \$20,000
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
M D TRYMAN		JSC/C M HOSKINS		99-Multi-Discip

NAS 3-23901		Mississippi State University		5454
SCIENTIFIC SUPPORT FOR AN ORBITER EXPERIMENT ON SOLID SURFACE COMBUSTION				
<i>Period</i>		<i>Obligations</i>		
12/19/1984-12/17/1994		FY94: \$128,000		TOTAL: \$973,638
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
R A ALTENKIRCH		LERC/K R SACKSTEDER		49-Engr, NEC

NAS 8-38857		Mississippi State University		5455
CAG I COMPUTER AIDED INTERFACE				
<i>Period</i>		<i>Obligations</i>		
05/16/1991-05/15/1996		FY94: \$149,995		TOTAL: \$349,995
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
B K SONI		MSFC/G A WILHOLD		29-Math/Cmputer,NEC
		MSFC/T G BENJAMIN		

NCC 3-221		Mississippi State University		5456
LOW-VELOCITY, OPPOSED-FLOW FLAME SPREAD IN A TRANS PORT-CONTROLLED, MICROGRAVITY ENVIRONMENT				
<i>Period</i>		<i>Obligations</i>		
06/19/1991-11/14/1994		FY94: \$0		TOTAL: \$336,981
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
R A ALTENKIRCH		LERC/J A SALZMAN		19-Phys Sci, NEC
S BHATTA CHARJEE		LERC/H D ROSS		

NGT 00-010-011		Mississippi State University		5457
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP P ROGRAM				
<i>Period</i>		<i>Obligations</i>		
10/04/1993-06/30/1994		FY94: \$50,000		TOTAL: \$50,000
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
J C MCWHORTER		HQ/G S SEIDEL		41-Aero Engr
		HQ/J R FACEY		

NGT 00-050-694		Mississippi State University		5458
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
05/07/1991-07/07/1995		FY94: \$22,000		TOTAL: \$88,000
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
K KOENIG		HQ/F C OWENS		42-Astro Engr

NGT 00-050-950		Mississippi State University		5459
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
08/04/1992-08/15/1995		FY94: \$22,000		TOTAL: \$66,000
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
R A ALTENKIRCH		LERC/F MONTEGANI		46-Mech Engr

NGT 00-070-367		Mississippi State University		5460
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
11/23/1993-06/30/1995		FY94: \$44,000		TOTAL: \$44,000
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
D MARCUM		HQ/D K RUSSELL		46-Mech Engr

NSG-1577		Mississippi State University		5461
TRANSFORMATION OF TWO AND THREE DIMENSIONAL REGIONS BY ELLIPTIC SYSTEMS				
<i>Period</i>		<i>Obligations</i>		
11/16/1978-03/31/1994		FY94: \$0		TOTAL: \$555,765
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
J F THOMPSON		LARC/R E SMITH JR		21-Mathematics
C W MASTIN		LARC/J N SHOOSMITH		

NAG 8-225		Mississippi Valley State Univ.		5462
JOVE				
<i>Period</i>		<i>Obligations</i>		
02/05/1992-10/04/1994		FY94: \$500		TOTAL: \$64,783
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
R WILLIAMS		MSFC/F SIX		22-Computer Science

NAG13-23		Pearl River Junior College		5463
GEOGRAPHIC INFORMATION SYSTEM AND TRANSFER PROGRAM SAME				
<i>Period</i>		<i>Obligations</i>		
11/03/1992-11/02/1994		FY94:		TOTAL: \$19,133
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>		<i>CASE Category</i>
J COLEMAN		SSC/R GALE		19-Phvs Sci, NEC

NASA'S UNIVERSITY PROGRAM
MISSISSIPPI (Continued)

NAG 2-786 University of Mississippi - Medical Center 5464

OTOLITH-CANAL CONVERGENCE IN VESTIBULAR NUCLEI NEURONS

Period	Obligations	
06/05/1992-03/31/1995	FY94: \$57,979	TOTAL: \$173,555
Prin. Invest.	NASA Tech. Officer	CASE Category
J D DICKMAN	ARC/M L CORCORAN	51-Biological Sci
	ARC/C E WADE	

NCC 2-863 University of Mississippi - Medical Center 5465

EFFECTS OF GRAVITY ON ATTACHMENT OF TENDON TO BONE

Period	Obligations	
06/21/1994-05/31/1995	FY94: \$65,116	TOTAL: \$65,116
Prin. Invest.	NASA Tech. Officer	CASE Category
R B JOHNSON	ARC/D A REISS-BUBENHEIM	51-Biological Sci
L D ZARDIACKAS	ARC/C M WINGET	

NAG 1-1076 University of Mississippi - University 5466

RESEARCH IN ATMOSPHERIC ACOUSTICS

Period	Obligations	
12/19/1989-12/31/1992	FY94: \$0	TOTAL: \$339,298
Prin. Invest.	NASA Tech. Officer	CASE Category
H E BASS	LARC/W L WILLSHIRE	13-Physics
R RASPET		

NAG 1-1460 University of Mississippi - University 5467

RESEARCH IN ATMOSPHERIC ACOUSTICS

Period	Obligations	
12/18/1992-02/28/1995	FY94: \$35,616	TOTAL: \$173,790
Prin. Invest.	NASA Tech. Officer	CASE Category
H E BASS	LARC/W L WILLSHIRE	13-Physics
R RASPET	LARC/G L MCANINCH	

NAG 3-1642 University of Mississippi - University 5468

FLOW FEATURE EXTRACTION FROM STEROSCOPIC PARTICLE TRACKING VELOCIMETRY DATA

Period	Obligations	
07/11/1994-07/10/1995	FY94: \$15,000	TOTAL: \$15,000
Prin. Invest.	NASA Tech. Officer	CASE Category
S SINHA	LERC/M BETHEA	46-Mech Engr

NAS 8-39745 University of Mississippi - University 5469

ULTRASONIC NDE SCANS OF BODIES OF ARBITRARY SHAPE

Period	Obligations	
06/21/1993-09/30/1994	FY94: \$11,446	TOTAL: \$41,268
Prin. Invest.	NASA Tech. Officer	CASE Category
R HICKLING	MSFC/M W SUITS	45-Elec Engr
	MSFC/D BROWN	

NGT 00-040-028 University of Mississippi - University 5470

NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM

Period	Obligations	
05/21/1991-02/28/1995	FY94: \$205,000	TOTAL: \$767,950
Prin. Invest.	NASA Tech. Officer	CASE Category
M R DINGERSON	HQ/E T SCHWARTZ	99-Multi-Discip

NGT 00-070-401 University of Mississippi - University 5471

NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
09/29/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
M T HARMANN	HQ/D K RUSSELL	19-Phys Sci, NEC

NAG 8-973 University of Southern Mississippi 5472

POLYMERIZATION IN MICROGRAVITY

Period	Obligations	
06/09/1993-06/14/1995	FY94: \$100,000	TOTAL: \$200,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L J MATHIAS	MSFC/J P DOWNEY	19-Phys Sci, NEC

NAG13-28 University of Southern Mississippi 5473

EVALUATION OF POLYMER DISPERSED LIQUID CRYSTAL DEVICES

Period	Obligations	
12/17/1993-12/16/1994	FY94: \$74,573	TOTAL: \$74,573
Prin. Invest.	NASA Tech. Officer	CASE Category
WHITEHEAD	SSC/THURMAN	19-Phys Sci, NEC
	SSC/JOYCE	

NGT 00-051-261 University of Southern Mississippi 5474

GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/08/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
L J MATHIAS	HQ/G LESANE	43-Chem Engr

NGT 00-060-003 University of Southern Mississippi 5475

SUMMER FACULTY FELLOWSHIP PROGRAM

Period	Obligations	
05/14/1990-03/31/1995	FY94: \$254,218	TOTAL: \$759,609
Prin. Invest.	NASA Tech. Officer	CASE Category
J E MILLER	HQ/A S MCGEE	49-Engr, NEC
	HQ/E T SCHWARTZ	

NGT 00-070-394 University of Southern Mississippi 5476

NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
08/30/1994-06/30/1997	FY94: \$44,000	TOTAL: \$44,000
Prin. Invest.	NASA Tech. Officer	CASE Category
G H RAYBORN	HQ/D K RUSSELL	22-Computer Science

MISSOURI

NAG 2-454 Saint Louis University 5477

SKELETAL COLLAGEN TURNOVER BY THE OSTEOBLAST

Period	Obligations	
03/01/1987-12/31/1994	FY94: \$70,000	TOTAL: \$489,668
Prin. Invest.	NASA Tech. Officer	CASE Category
N C PARTRIDGE	ARC/E M HOLTON	51-Biological Sci
	ARC	

NAG 2-888 Saint Louis University 5478

EFFECT OF MICROGRAVITY ON OSTEOBLASTIC GENE EXPRESSION

Period	Obligations	
03/22/1994-12/31/1994	FY94: \$79,697	TOTAL: \$79,697
Prin. Invest.	NASA Tech. Officer	CASE Category
N C PARTRIDGE	ARC/E M HOLTON	51-Biological Sci

NCC 3-330 Saint Louis University 5479

THIN FILM SOLID LUBRICANT DEVELOPMENT

Period	Obligations	
12/17/1993-12/16/1994	FY94: \$40,000	TOTAL: \$40,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P A BENOY	LERC/C DELLACORTE	47-Materials Engr

NASA'S UNIVERSITY PROGRAM **MISSOURI (Continued)**

NGT 00-050-673 Saint Louis University 5480
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/25/1990-07/31/1993 FY94: TOTAL: \$65,676
Prin. Invest. NASA Tech. Officer CASE Category
N C PARTRIDGE HQ/F C OWENS 51-Biological Sci

NGT 00-051-145 Saint Louis University 5481
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/28/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
N C PARTRIDGE HQ/R WHITE 56-Medical Sciences

NAG 8-993 Southeast Missouri State University 5482
JOVE
Period Obligations
11/26/1993-05/31/1995 FY94: \$78,409 TOTAL: \$78,409
Prin. Invest. NASA Tech. Officer CASE Category
D PROBET MSFC/F SIX 54-Env Biology
G CWICK
J GONG

NAG 2-589 University of Missouri - Columbia 5483
PORTABLE LIFE SUPPORT SYSTEM/HEAT REJECTION
Period Obligations
08/04/1989-06/30/1993 FY94: \$0 TOTAL: \$141,572
Prin. Invest. NASA Tech. Officer CASE Category
J B MILES ARC/B W WEBBON 41-Aero Engr
ARC/W C LOMAX

NAG 3-1420 University of Missouri - Columbia 5484
CROSS EFFECTS IN MICROGRAVITY FLOWS
Period Obligations
01/08/1993-12/31/1995 FY94: \$90,000 TOTAL: \$180,000
Prin. Invest. NASA Tech. Officer CASE Category
S K LOYALKA LERC/W M DUVAL 47-Materials Engr

NAG 3-1477 University of Missouri - Columbia 5485
USING CONCURRENT, MULTI-LEVEL SUBSTRUCTURING TECH
NIQUES TO PERFORM FIN ELEMENT BASED ANALYSIS OF LG SC MO
Period Obligations
04/22/1993-06/12/1995 FY94: \$39,483 TOTAL: \$64,483
Prin. Invest. NASA Tech. Officer CASE Category
G D GUTE LERC/S S PAI 49-Engr, NEC
LERC/D A HOPKINS

NAG 3-1581 University of Missouri - Columbia 5486
GUIDANCE, NAVIGATION, AND CONTROL STUDY FOR A SOLAR
ELECTRIC PROPULSION SPACECRAFT
Period Obligations
03/17/1994-03/16/1995 FY94: \$10,295 TOTAL: \$10,295
Prin. Invest. NASA Tech. Officer CASE Category
C A KLUEVER LERC/J M HICKMAN 42-Astro Engr

NAG 3-1650 University of Missouri - Columbia 5487
OPTIMAL LUNAR AND COMETARY RENDEVOUS TRAJECTORIES FOR
A SOLAR ELECTRIC PROPULSION SPACECRAFT
Period Obligations
07/13/1994-07/12/1995 FY94: \$9,016 TOTAL: \$9,016
Prin. Invest. NASA Tech. Officer CASE Category
C A KLUEVER LERC/J M HICKMAN 42-Astro Engr

NAG 5-2425 University of Missouri - Columbia 5488
STRAIN ACCUMULATION MONITORING IN THE NEW MADRID S
EISMIC ZONE USING THE GLOBAL POSITIONING SYSTEM
Period Obligations
11/10/1993-11/14/1994 FY94: \$28,574 TOTAL: \$28,574
Prin. Invest. NASA Tech. Officer CASE Category
J ENGEL GSFC/B G BILLS 32-Geological Sci

NAG 5-2573 University of Missouri - Columbia 5489
AUTOMATIC ANALYSIS OF CLOUD WINDS FROM STEREO CLOU D
HEIGHTS AND CLOUD MOTIONS USING ROBUST. . . .
Period Obligations
04/29/1994-01/31/1995 FY94: \$51,000 TOTAL: \$51,000
Prin. Invest. NASA Tech. Officer CASE Category
X ZHUANG GSFC/A F HASLER 31-Atmos Sci

NAG 9-404 University of Missouri - Columbia 5490
RESEARCH ON TARGETING METHODS FOR MANUAL CONTROLLED
DOCKING
Period Obligations
10/23/1989-02/01/1994 FY94: \$0 TOTAL: \$56,372
Prin. Invest. NASA Tech. Officer CASE Category
J KNOPP JSC/R JUDAY 41-Aero Engr
JSC/C K LAND

NAG 9-466 University of Missouri - Columbia 5491
DEMONSTRATION OF OPTICAL CORRELATION FOR MARS LANDER
APPLICATION
Period Obligations
08/23/1990-10/01/1993 FY94: TOTAL: \$91,042
Prin. Invest. NASA Tech. Officer CASE Category
J KNOPP JSC/R JUDAY 49-Engr, NEC

NAG 9-606 University of Missouri - Columbia 5492
FIBER OPTIC IMAGING SYSTEM DESIGN
Period Obligations
05/12/1992-08/01/1994 FY94: \$0 TOTAL: \$29,800
Prin. Invest. NASA Tech. Officer CASE Category
J KNOPP JSC/R JUDAY 41-Aero Engr

NAG 9-711 University of Missouri - Columbia 5493
JOINT CORRELATION SURGICAL LASER POINTING
Period Obligations
07/30/1993-01/01/1995 FY94: \$3,000 TOTAL: \$17,827
Prin. Invest. NASA Tech. Officer CASE Category
J KNAPP JSC/R JUDAY 56-Medical Sciences

NAGW 3302 University of Missouri - Columbia 5494
STRESSES AND STRAINS WITHIN THE STABLE NORTH AMERICAN
PLATE
Period Obligations
01/06/1993-12/31/1993 FY94: \$0 TOTAL: \$56,560
Prin. Invest. NASA Tech. Officer CASE Category
J F ENGEH HQ/M BALTUCK 32-Geological Sci

NAGW 3864 University of Missouri - Columbia 5495
NAGW-3864/UNIV MISSOURI/ANALYSIS OF ICE SHEET ALTIMETRY
DATA
Period Obligations
02/02/1994-12/31/1994 FY94: \$107,863 TOTAL: \$107,863
Prin. Invest. NASA Tech. Officer CASE Category
C DAVIS HQ/R H THOMAS 39-Env Sci, NEC
HQ/J S THEON

NASA'S UNIVERSITY PROGRAM
MISSOURI (Continued)

NAGW 3910 University of Missouri - Columbia 5496
 NAGW-3910/B UNIV. OF MISSOURI COLUMBIA 12-MONTH AWARD

Period	Obligations	
03/28/1994-01/14/1995	FY94: \$50,000	TOTAL: \$50,000
Prin. Invest.	NASA Tech. Officer	CASE Category
T JONES	HQ/T W HALSTEAD	61-Biol Aspects

NAGW 2846 University of Missouri - Rolla 5503
 ADVANCED PHOTONIC MATERIALS PRODUCED BY CONTAINERLESS PROCESSING

Period	Obligations	
01/24/1992-11/30/1994	FY94: \$80,000	TOTAL: \$240,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D E DAY	HQ/B M CARPENTER	13-Physics
C S CHANDRA		

NCC 2-823 University of Missouri - Columbia 5497
 CONTROL AND HEAT REJECTION ISSUES FOR PORTABLE LIFE SUPPORT SYSTEMS

Period	Obligations	
08/23/1993-09/30/1994	FY94: \$46,236	TOTAL: \$70,000
Prin. Invest.	NASA Tech. Officer	CASE Category
S S NAIR	ARC/B W WEBBON	49-Engr, NEC
J B MILES	ARC/R N BRETOI	

NCC 3-343 University of Missouri - Rolla 5504
 PARTICULATE EMISSIONS CHARACTERIZATION FOR HSCT RELATED TESTS: FLAME TUBE, ANNULAR SECTOR COMBUSTOR

Period	Obligations	
04/25/1994-04/24/1995	FY94: \$328,000	TOTAL: \$328,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P WHITFIELD	LERC/R W NIEDZWIECKI	19-Phys Sci, NEC
D HAGEN	LERC/K P KUNDU	
H LILLENFELD		

NAG 1-1189 University of Missouri - Rolla 5498
 ANALYTICAL AND COMPUTATIONAL INVESTIGATION OF SUPERSONIC COMBUSTOR FLOW FIELDS

Period	Obligations	
09/26/1990-09/24/1995	FY94: \$90,040	TOTAL: \$275,207
Prin. Invest.	NASA Tech. Officer	CASE Category
D W RIGGINS	LARC/C R MCCLINTON	41-Aero Engr
	LARC/S H STACK	

NGT 00-051-338 University of Missouri - Rolla 5505
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/21/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D RIGGINS	LARC/C MCCLINTON	41-Aero Engr

NAG 1-1482 University of Missouri - Rolla 5499
 ANALYSIS OF UNSTEADY PRESSURE DISTRIBUTIONS AROUND AEROELASTIC WING MODELS IN TRANSONIC FLOW

Period	Obligations	
02/05/1993-03/05/1995	FY94: \$24,900	TOTAL: \$47,423
Prin. Invest.	NASA Tech. Officer	CASE Category
F FINAISH	LARC/R M BENNETT	41-Aero Engr
	LARC/W A SILVA	

NAGW 2474 University of Missouri - Saint Louis 5506
 METHANE ABSORPTION SPECTROSCOPY

Period	Obligations	
05/23/1991-05/31/1994	FY94: \$56,115	TOTAL: \$192,848
Prin. Invest.	NASA Tech. Officer	CASE Category
J J O'BRIEN	HQ/W L QUAIDE	11-Astronomy

NAG 1-1174 Washington University 5507
 ANALYSIS OF LDEF EXPERIMENT A0187-2: CHEMICAL AND ISOTOPIC MEASUREMENTS OF MICROMETEORIDS BY 2ND

Period	Obligations	
08/14/1990-08/14/1994	FY94: \$0	TOTAL: \$548,000
Prin. Invest.	NASA Tech. Officer	CASE Category
E ZINNER	LARC/L A TEICHMAN	47-Materials Engr
R M WALKER	LARC/J L JONES	

NAG 1-1632 University of Missouri - Rolla 5500
 PARTICULATE CHARACTERIZATION OF COMMERCIAL JET ENGINE EMISSIONS AT CRUISE

Period	Obligations	
07/06/1994-07/05/1995	FY94: \$30,260	TOTAL: \$30,260
Prin. Invest.	NASA Tech. Officer	CASE Category
D E HAGEN	LARC/W R COFER	31-Atmos Sci
	LARC/W L GROSE	

NAG 1-1373 Washington University 5508
 INTERGRATION OF DYNAMIC, AERODYNAMIC AND STRUCTURAL OPTIMIZATION OF HELICOPTER ROTOR BLADES

Period	Obligations	
01/24/1992-07/23/1994	FY94: \$0	TOTAL: \$148,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D A PETERS	LARC/H M ADELMAN	41-Aero Engr
	LARC/J I PRITCHARD	

NAG 2-720 University of Missouri - Rolla 5501
 INVESTIGATION OF COMBUSTION AEROSOLS AS A POTENTIAL SINK FOR NOX IN THE EXPANDING EXHAUST PLUME ...

Period	Obligations	
08/12/1991-12/31/1993	FY94: \$0	TOTAL: \$260,567
Prin. Invest.	NASA Tech. Officer	CASE Category
P D WHITEFIELD	ARC/E CONDON	31-Atmos Sci
D E HAGEN	ARC/B TOON	

NAG 2-728 Washington University 5509
 DEVELOPMENT OF AN UNSTEADY WAKE THEORY APPROPRIATE FOR AEROELASTIC ANALYSES OF ROTORS IN HOVER ...

Period	Obligations	
08/21/1991-08/31/1994	FY94: \$0	TOTAL: \$220,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D A PETERS	ARC/R A ORMISTON	41-Aero Engr

NAG 8-898 University of Missouri - Rolla 5502
 KINETICS OF PHASE TRANSFORMATIONS IN GLASS FORMING SYSTEM

Period	Obligations	
11/14/1992-11/14/1994	FY94: \$0	TOTAL: \$153,147
Prin. Invest.	NASA Tech. Officer	CASE Category
C S RAY	MSFC/E C ETHRIDGE	12-Chemistry

NAG 2-865 Washington University 5510
 INFLUENCE OF HIGH PRESSURE HYDROGEN ENVIRONMENT ON CREEP DEFORMATION OF MO-RE, HAYNES 188, AND

Period	Obligations	
08/10/1993-08/31/1995	FY94: \$0	TOTAL: \$162,641
Prin. Invest.	NASA Tech. Officer	CASE Category
S M SASTRY	ARC/H G NELSON	47-Materials Engr

NASA'S UNIVERSITY PROGRAM
MISSOURI (Continued)

NAG 5-2246 Washington University 5511
MARS OBSERVER LASER ALTIMETER
Period *Obligations*
04/30/1993-06/30/1994 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J PHILLIPS GSFC/D E SMITH 39-Env Sci, NEC

NAG 9-684 Washington University 5519
ION MICROPROBE STUDIES OF THE METEOROID AND ORBITAL DEBRIS COMPLEX
Period *Obligations*
04/26/1993-04/01/1995 FY94: \$0 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E ZINNER JSC/M ZOLENSKY 13-Physics

NAG 8-873 Washington University 5512
KINETICS OF PHASE TRANSFORMATION IN GLASS FORMING SYSTEMS
Period *Obligations*
04/10/1991-10/15/1994 FY94: \$0 TOTAL: \$176,758
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K F KELTON MSFC/E C ETHRIDGE 13-Physics
C S RAY

NAGW 432 Washington University 5520
STRUCTURE AND EVOLUTION OF OUTER PLANET SATELLITE
Period *Obligations*
03/01/1983-10/31/1994 FY94: \$51,000 TOTAL: \$429,660
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W B MCKINNON HQ/J M UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAG 9-7 Washington University 5513
LUNAR/PLANETARY SURFACE DYNAMICS
Period *Obligations*
02/01/1980-12/15/1993 FY94: \$0 TOTAL: \$1,970,184
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C M HOHENBERG JSC/I D BROWNE 31-Atmos Sci

NAGW 1358 Washington University 5521
TOWARD GLOBAL PERSPECTIVES ON CONTINENTAL TECTONICS
Period *Obligations*
08/01/1988-12/31/1994 FY94: \$190,000 TOTAL: \$1,277,337
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E ARVIDSON HQ/M BALTUCK 32-Geological Sci
HQ/T J PIEPER

NAG 9-55 Washington University 5514
MEASUREMENTS OF EXTRATERRESTRIAL
Period *Obligations*
02/01/1983-03/01/1993 FY94: \$0 TOTAL: \$5,033,100
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R M WALKER JSC/I D BROWNE 32-Geological Sci
ARC/V R CORSIGLIA

NAGW 1872 Washington University 5522
ANALYSIS OF REMOTE SENSING DATA FOR THE SURFACES OF THE TERRESTRIAL PLANETS
Period *Obligations*
07/16/1990-09/30/1994 FY94: \$189,737 TOTAL: \$822,736
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R E ARVIDSON HQ/T A MAXWELL 32-Geological Sci

NAG 9-56 Washington University 5515
STUDIES OF LUNAR ROCKS
Period *Obligations*
02/01/1983-09/01/1993 FY94: \$0 TOTAL: \$2,122,826
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A HASKIN JSC/I D BROWNE 32-Geological Sci
R L KOROTEV
D J LINDSTROM

NAGW 2304 Washington University 5523
STUDIES OF SOLAR NEBULA STRUCTURE AND EVOLUTION
Period *Obligations*
02/26/1991-04/30/1995 FY94: \$70,200 TOTAL: \$305,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F A PODOSEK HQ/J A NUTH 19-Phys Sci, NEC

NAG 9-292 Washington University 5516
AB-SR + SM-ND GEOCHRONOLOGY OF DIAMONDS
Period *Obligations*
04/01/1988-10/01/1993 FY94: \$0 TOTAL: \$323,318
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F A PODOSEK JSC/I D BROWNE 32-Geological Sci

NAGW 2423 Washington University 5524
LUNAR ULTRAVIOLET-INFRARED MAPPING INTERFEROMETRIC SPECTROMETER
Period *Obligations*
07/02/1991-02/28/1994 FY94: \$0 TOTAL: \$397,979
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W H SMITH HQ/W L QUAIDE 19-Phys Sci, NEC

NAG 9-622 Washington University 5517
SOLUTION OF ELASTIC PLASTIC STRESS ANALYSIS PROBLEM BY P-VERSION OF FINITE ELEMENT METHOD
Period *Obligations*
09/03/1992-01/01/1995 FY94: \$70,000 TOTAL: \$138,816
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B SZABO JSC/J J MCMAHON 46-Mech Engr

NAGW 2818 Washington University 5525
AQUEOUS ALTERATIONS OF ORGANIC MATTER ON METEORITE PARENT BODIES
Period *Obligations*
01/03/1992-12/31/1994 FY94: \$0 TOTAL: \$103,451
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E L SHOCK HQ/M MEYER 12-Chemistry

NAG 9-653 Washington University 5518
CULTURE OF PORCINE ISLET TISSUE/EVALUATION OF MICROGRAVITATIONAL CONDITIONS
Period *Obligations*
10/28/1992-02/01/1995 FY94: \$170,000 TOTAL: \$330,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D W SCHARP GSFC/G SPAULDING 51-Biological Sci

NAGW 2836 Washington University 5526
NAGW-2836/WASHINGTON UNIV/IMPROVEMENT OF CAPTURE CELLS FOR COSMIC DUST EXPERIMENTS IN SPACE
Period *Obligations*
01/17/1992-06/30/1993 FY94: \$0 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W WALKER HQ/W L QUAIDE 12-Chemistry

**NASA'S UNIVERSITY PROGRAM
MISSOURI (Continued)**

NAGW 3634 Washington University 5543
ISOTOPIC STRUCTURE AND FINE-SCALE CHRONOLOGY IN PLANETARY MATERIALS
Period Obligations
06/17/1993-03/31/1995 FY94: \$69,445 TOTAL: \$149,545
Prin. Invest. NASA Tech. Officer CASE Category
F PODESEK HQ/J BOYCE 32-Geological Sci

NAGW 3701 Washington University 5544
MAGMATIC AND TECTONIC EVOLUTION OF VENUS
Period Obligations
08/03/1993-03/14/1995 FY94: \$51,408 TOTAL: \$122,780
Prin. Invest. NASA Tech. Officer CASE Category
R J PHILLIPS HQ/J T BERGSTRAHL 32-Geological Sci

NAGW 3874 Washington University 5545
NAGW-3874/B WASH. UNIV. ' THEORETICAL FOUND. OF GRAV. PHYSICS EXPERIMENTS IN SPACE'
Period Obligations
02/25/1994-12/31/1994 FY94: \$70,928 TOTAL: \$70,928
Prin. Invest. NASA Tech. Officer CASE Category
C M WILL HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAG10-107 Washington University 5546
DEVELOPMENT OF AN ANALOG INTERFACE PROCESSOR FOR USE IN A DIGITAL HEARING AID
Period Obligations
06/01/1992-11/30/1993 FY94: TOTAL: \$38,632
Prin. Invest. NASA Tech. Officer CASE Category
R E MORLEY KSC/D DAVIS 99-Multi-Discip

NCA 2-592 Washington University 5547
REMOTE SENSING OF EARTH'S ATMOSPHERE AND SURFACE USING A DIGITAL ARRAY SCANNED INTERFEROMETER
Period Obligations
02/27/1991-03/31/1993 FY94: \$0 TOTAL: \$21,998
Prin. Invest. NASA Tech. Officer CASE Category
H SMITH ARC/P D HAMMER 31-Atmos Sci

NCC 8-49 Washington University 5548
COMPOSITIONAL DEPENDENCE OF PHASE FORMATION AND STABILITY
Period Obligations
06/20/1994-06/19/1995 FY94: \$46,942 TOTAL: \$46,942
Prin. Invest. NASA Tech. Officer CASE Category
K F KELTON MSFC/E C ETHRIDGE 47-Materials Engr
MSFC/M ROBINSON

NGT 00-040-029 Washington University 5549
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
06/05/1991-02/28/1995 FY94: \$170,000 TOTAL: \$660,000
Prin. Invest. NASA Tech. Officer CASE Category
R E ARVIDSON HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-629 Washington University 5550
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1990-06/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
W B MCKINNON HQ/F C OWENS 13-Physics

NGT 00-050-789 Washington University 5551
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/13/1991-06/30/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
J KLARMANN HQ/F C OWENS 13-Physics

NGT 00-051-061 Washington University 5552
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/15/1993-06/30/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
K F KELTON HQ/D A HOLLAND 13-Physics

NGT 00-051-298 Washington University 5553
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/28/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
R M WALKER HQ/D HOLLAND 13-Physics

NGT 00-051-319 Washington University 5554
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
J KLARMANN HQ/D HOLLAND 13-Physics

NSG-1601 Washington University 5555
NON-DESTRUCTIVE EVALUATION OF COMPOSITE STRUCTURES USING FOURIER ANALYSIS OF ULTRASONIC SIGNALS
Period Obligations
03/09/1979-03/14/1995 FY94: \$60,000 TOTAL: \$1,501,337
Prin. Invest. NASA Tech. Officer CASE Category
J G MILLER LARC/P H JOHNSTON 13-Physics
LARC/J S HEYMAN

MONTANA

NAG 8-262 Eastern Montana University 5556
JOVE
Period Obligations
12/30/1992-05/31/1995 FY94: \$12,068 TOTAL: \$45,213
Prin. Invest. NASA Tech. Officer CASE Category
A F BENTLEY MSFC/F SIX 13-Physics

NAG 5-1830 Montana State University 5557
SIMULTANEOUS OBSERVATIONS OF SOME SEYFERT NUCLEI
Period Obligations
11/22/1991-06/30/1993 FY94: \$0 TOTAL: \$13,982
Prin. Invest. NASA Tech. Officer CASE Category
S TSURUTA GSFC/R PETRE 11-Astronomy

NAG 8-230 Montana State University 5558
TEMPORAL AND SPECTRAL STUDIES OF SEYFERT NUCLEI
Period Obligations
03/02/1992-03/02/1993 FY94: TOTAL: \$20,448
Prin. Invest. NASA Tech. Officer CASE Category
S TSURUTA MSFC/J VARGAS 11-Astronomy

NASA'S UNIVERSITY PROGRAM
MONTANA (Continued)

NAG 8-289 **Montana State University** **5559**
 TEMPORAL AND SPECTRAL STUDIES OF SUYFERT NUCLEI
Period *Obligations*
 05/17/1993-01/31/1994 FY94: \$0 TOTAL: \$18,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S TSURUTA MSFC/J VARGAS 11-Astronomy

NAG 9-505 **Montana State University** **5560**
 RAPID BACTERIAL TESTING FOR US SPACE STATION WATER
 SYSTEM USING IMAGE ANALYSIS
Period *Obligations*
 04/04/1991-03/01/1995 FY94: \$42,000 TOTAL: \$226,175
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G A MCFETERS JSC/R L SAUER 56-Medical Sciences

NAGW 2208 **Montana State University** **5561**
 SOME SELECTED PROBLEMS IN HIGH ENERGY SPACE ASTROPHYSICS
Period *Obligations*
 08/09/1990-12/31/1994 FY94: \$74,963 TOTAL: \$338,795
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S TSURUTA HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2764 **Montana State University** **5562**
 MOLECULAR AND GEOCHEMICAL ANALYSIS OF HOT SPRING CYCNOBACTERIAL AND CHLOROFLEXUS
Period *Obligations*
 11/08/1991-10/31/1994 FY94: \$120,747 TOTAL: \$351,546
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D M WARD HQ/J D RUMMEL 54-Env Biology

NAGW 2951 **Montana State University** **5563**
 RESEARCH IN GRAVITATIONAL ASTROPHYSICS
Period *Obligations*
 03/04/1992-09/14/1993 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L A LINDBLOM HQ/R STACHNIK 11-Astronomy
 HQ/E J WEILER

NCA 2-659 **Montana State University** **5564**
 QUIET SUPERSONIC TUNNEL RESEARCH
Period *Obligations*
 09/17/1991-09/14/1993 FY94: \$0 TOTAL: \$45,136
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A DEMETRIADES ARC/D REDA 46-Mech Engr
 ARC/L KING

NCC 2-5009 **Montana State University** **5565**
 MECHANISMS AND SUPPRESSION OF TRANSITION IN SUPERSONIC NOZZLES
Period *Obligations*
 11/16/1993-10/31/1995 FY94: \$39,036 TOTAL: \$39,036
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A DEMETRIADES ARC/J LAUB 41-Aero Engr
 ARC/L KING

NCCW 58 **Montana State University** **5566**
 EPSCOR PROGRAM
Period *Obligations*
 08/19/1994-02/28/1995 FY94: \$500,000 TOTAL: \$500,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W A HISCOCK HQ/A S MCGEE 99-Multi-Discip
 HQ/E T SCHWARTZ

NGT 00-040-041 **Montana State University** **5567**
 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
 06/03/1991-02/28/1995 FY94: \$170,500 TOTAL: \$663,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W A HISCOCK HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-051-196 **Montana State University** **5568**
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 09/20/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J P WILSON LARC/E PRIOR 32-Geological Sci

NAG 5-2065 **University of Montana** **5569**
 FIFE DATA ANALYSIS: TESTING BIOME-BGC PREDICTIONS FOR GRASSLANDS
Period *Obligations*
 07/31/1992-08/14/1994 FY94: \$0 TOTAL: \$69,411
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R E HUNT GSFC/P J SELLERS 39-Env Sci, NEC
 S RUNNING
 W PARTON

NAG 5-2297 **University of Montana** **5570**
 SIMULATION OF BOREAL ECOSYSTEM CARBON AND WATER BUDGETS: SCALING FROM LOCAL TO REGIONAL EXTENTS...
Period *Obligations*
 07/12/1993-07/31/1995 FY94: \$70,000 TOTAL: \$105,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S W RUNNING GSFC/F G HALL 39-Env Sci, NEC
 GSFC/P SELLERS

NAG 8-235 **University of Montana** **5571**
 JOVE
Period *Obligations*
 06/05/1992-07/15/1994 FY94: \$0 TOTAL: \$81,723
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N W HINMAN MSFC/F SIX 32-Geological Sci
 D FRIEND
 J W SEARS

NAGW 952 **University of Montana** **5572**
 NET PRIMARY PRODUCTION OF CONIFEROUS FORESTS
Period *Obligations*
 10/01/1986-03/31/1994 FY94: \$0 TOTAL: \$1,083,402
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S W RUNNING HQ/D E WICKLAND 39-Env Sci, NEC
 D F POTTS HQ/M J RUZEK
 L E BAND

NAGW 3151 **University of Montana** **5573**
 NAGW-3151/UNIV MONTANA/ASSESSMENT OF ANTHROPOGENIC AND CLIMATIC IMPACTS ON THE GLOBAL CARBON CYCLE
Period *Obligations*
 08/04/1992-04/30/1995 FY94: \$54,563 TOTAL: \$142,841
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R NEMANI HQ/R E MURPHY 39-Env Sci, NEC
 S W RUNNING HQ/D M BUTLER

NAS 5-31368 **University of Montana** **5574**
 EOS MODIS INVESTIGATION FROM DR. STEVE RUNNING
Period *Obligations*
 01/07/1992-12/14/2001 FY94: \$230,000 TOTAL: \$605,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S W RUNNING GSFC/H OSEROFF 39-Env Sci, NEC

NASA'S UNIVERSITY PROGRAM **MONTANA (Continued)**

NGT 00-030-007 University of Montana 5575
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 10/05/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 L L PIERCE HQ/G ASRAR 39-Env Sci, NEC

NGT 00-030-169 University of Montana 5576
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 08/23/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 G N RICHARDS HQ/G ASRAR 31-Atmos Sci
 HQ/D M BUTLER

NGT 00-030-216 University of Montana 5577
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 08/26/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 S W RUNNING HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NEBRASKA

NCC 2-861 Creighton University 5578
 EFFECTGS OF WEIGHTLESSNESS ON VESTIBULAR DEVELOPME
 NT
Period Obligations
 06/21/1994-06/30/1994 FY94: \$90,187 TOTAL: \$90,187
Prin. Invest. NASA Tech. Officer CASE Category
 B FRITZSCH ARC/D A REISS-BUBENHEIM 51-Biological Sci
 L L BRUCE ARC/C M WINGET

NAG 1-1447 University of Nebraska - Lincoln 5579
 THEORETICAL EVALUATION OF THE RADIATION HAZARDS FROM
 COSMIC RAYS WITHIN SPACE VEHICLES
Period Obligations
 08/26/1992-12/31/1994 FY94: \$40,001 TOTAL: \$70,001
Prin. Invest. NASA Tech. Officer CASE Category
 R KATZ LARC/F A CUCINOTTA 13-Physics
 LARC/E J CONWAY

NAG 3-95 University of Nebraska - Lincoln 5580
 INTERCALATED CARBON FIBER CONDUCTOR FOR AEROSPACE
 USE
Period Obligations
 08/28/1980-01/31/1995 FY94: \$45,000 TOTAL: \$588,482
Prin. Invest. NASA Tech. Officer CASE Category
 J A WOOLLAM LERC/D A JAWORSKE 45-Elec Engr

NAG 3-806 University of Nebraska - Lincoln 5581
 ERROR PROTECTION FOR DIGITAL IMAGE TRANS OVER NOISY
 CHANNELS
Period Obligations
 06/18/1987-05/13/1995 FY94: \$657 TOTAL: \$357,446
Prin. Invest. NASA Tech. Officer CASE Category
 K SAYOOD LERC/W A WHYTE 45-Elec Engr
 LERC/E F MILLER

NAG 3-866 University of Nebraska - Lincoln 5582
 LASER DEPOSITION OF THIN FILM SUPERCONDUCTORS FOR
 MICRODUCTORS FOR MICROELECTRONICS PREP AND EVAL.
Period Obligations
 01/16/1988-06/17/1994 FY94: \$0 TOTAL: \$275,000
Prin. Invest. NASA Tech. Officer CASE Category
 J A WOOLAM LERC/J D WARNER 13-Physics
 N J IANNO

NAG 3-1261 University of Nebraska - Lincoln 5583
 THEORETICAL MODELING OF A HIGH ENERGY LASER PULSE
 FOCUSED WITHIN AN AEROSOL SPRAY
Period Obligations
 03/15/1991-07/14/1993 FY94: TOTAL: \$37,669
Prin. Invest. NASA Tech. Officer CASE Category
 J P BARTON LERC/L C LARRY 13-Physics
 D R ALEXANDER

NAG 5-894 University of Nebraska - Lincoln 5584
 MEASURING AND MODELING NEAR SURFACE REFLECTED AND
 EMITTED RADIATION FLUXES
Period Obligations
 04/15/1987-04/30/1994 FY94: \$0 TOTAL: \$619,132
Prin. Invest. NASA Tech. Officer CASE Category
 B L BLAD GSFC/D L TOLL 39-Env Sci, NEC
 E A WALTER-SHEA GSFC/F HALL

NAG 5-1612 University of Nebraska - Lincoln 5585
 STUDY AND SIMULATION OF LOW RATE VIDEO CODING SCHE
 MES
Period Obligations
 05/24/1991-06/14/1995 FY94: \$34,961 TOTAL: \$167,902
Prin. Invest. NASA Tech. Officer CASE Category
 K SAYOOD GSFC/P SHU YEH 45-Elec Engr
 GSFC/W H MILLER

NAG 5-1762 University of Nebraska - Lincoln 5586
 MEASUREMENT OF SURFACE BIOPHYSICAL PROPERTIES AND
 RADIATION BALANCE FOR KUREX-91
Period Obligations
 09/10/1991-09/14/1993 FY94: \$0 TOTAL: \$66,750
Prin. Invest. NASA Tech. Officer CASE Category
 B L BLAD GSFC/D W DEERING 39-Env Sci, NEC
 E A WALTER-SHEA

NAG 5-2331 University of Nebraska - Lincoln 5587
 SURFACE ENERGY AND WATER BALANCES OF FOREST AND WE
 TLAND SUBSYSTEMS IN THE BOREAL FOREST: SURFACE..
Period Obligations
 07/27/1993-07/31/1995 FY94: \$87,900 TOTAL: \$132,900
Prin. Invest. NASA Tech. Officer CASE Category
 D E JELINSKI GSFC/F G HALL 39-Env Sci, NEC
 GSFC/P SELLERS

NAG 5-2585 University of Nebraska - Lincoln 5588
 FIELD MICROMETEOROLOGICAL MEASUREMENTS, PROCESS LE VEL
 STUDIES, AND MODELING OF METHANE. . . .
Period Obligations
 05/05/1994-05/14/1995 FY94: \$41,000 TOTAL: \$41,000
Prin. Invest. NASA Tech. Officer CASE Category
 S B VERMA GSFC/F G HALL 39-Env Sci, NEC
 GSFC/P J SELLERS

NASA'S UNIVERSITY PROGRAM
NEBRASKA (Continued)

NAG 5-2628 University of Nebraska - Lincoln 5589
 LABORATORY EQUIPMENT FOR THE SOUTHERN STUDY AREAS
Period Obligations
 06/15/1994-06/14/1995 FY94: \$7,329 TOTAL: \$7,329
Prin. Invest. NASA Tech. Officer CASE Category
 E WALTER-SHEA GSFC/F HALL 11-Astronomy

NAG 5-5024 University of Nebraska - Lincoln 5590
 COORDINATION OF SURFACE GLACIOLOGICAL INVESTIGATIONS AND FIELD OPS: NASA OVERSNOW EXP, GREENLAND 94
Period Obligations
 05/25/1994-12/31/1994 FY94: \$209,030 TOTAL: \$209,030
Prin. Invest. NASA Tech. Officer CASE Category
 K C KUIVINAN GSFC/W B KRABILL 39-Env Sci, NEC

NAG 9-633 University of Nebraska - Lincoln 5591
 EVALUATION OF EXTRAVEHICULAR ACTIVITY AND LAUNCH AND ENTRY SUIT
Period Obligations
 08/24/1992-08/31/1993 FY94: TOTAL: \$14,620
Prin. Invest. NASA Tech. Officer CASE Category
 R R BISHU JSC/S H GOLDSTEIN 19-Phys Sci, NEC

NAGW 1266 University of Nebraska - Lincoln 5592
 SYNEPTIC ANALYSIS OF ICE MELT FROM NIMBUS-7 SMMR
Period Obligations
 03/15/1988-12/31/1994 FY94: \$106,604 TOTAL: \$519,708
Prin. Invest. NASA Tech. Officer CASE Category
 M R ANDERSON HQ/R H THOMAS 33-Oceanography
 HQ/W S WILSON

NAGW 1275 University of Nebraska - Lincoln 5593
 PULSED ACCELERATION
Period Obligations
 04/06/1988-01/31/1994 FY94: \$0 TOTAL: \$260,174
Prin. Invest. NASA Tech. Officer CASE Category
 T A JONES HQ/T W HALSTEAD 51-Biological Sci

NAGW 1751 University of Nebraska - Lincoln 5594
 INTERACTION OF RADIATION WITH PLANETARY GASES
Period Obligations
 04/17/1989-11/30/1996 FY94: \$50,000 TOTAL: \$264,631
Prin. Invest. NASA Tech. Officer CASE Category
 J A SAMSON HQ/J T BERGSTRAHL 11-Astronomy

NAGW 2395 University of Nebraska - Lincoln 5595
 NAGW-2395/UNIV NEBRASKA/A TEST OF NEW RADIATIVE OPACITIES AND THEIR INCORPORATION INTO IMPROVED
Period Obligations
 02/21/1991-06/30/1994 FY94: \$45,967 TOTAL: \$422,643
Prin. Invest. NASA Tech. Officer CASE Category
 N R SIMON HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 3106 University of Nebraska - Lincoln 5596
 REMOTE MEASUREMENT OF ICE SHEET PARAMETERS AT DEPTH
Period Obligations
 06/22/1992-12/31/1994 FY94: \$110,117 TOTAL: \$317,026
Prin. Invest. NASA Tech. Officer CASE Category
 B L HANSEN HQ/R H THOMAS 39-Env Sci, NEC
 J R KELTY HQ/J S THEON
 K C KUIVINEN

NAGW 3262 University of Nebraska - Lincoln 5597
 NAGW-3262/UNIV NEBRASKA-LINCOLN/EVAL OF ADVANCED SENSOR TECHNOLOGY
Period Obligations
 10/29/1992-08/31/1995 FY94: \$47,712 TOTAL: \$103,942
Prin. Invest. NASA Tech. Officer CASE Category
 D RUNDQUIST HQ/M R HELFERT 39-Env Sci, NEC
 J MERCHANT HQ/D M BUTLER
 C KEITHLEY

NAGW 3940 University of Nebraska - Lincoln 5598
 NAGW-3940/B UNIV. NEBRASKA-LINCOLN 'REG. AND GLOBAL LAND COVER CHAR. VIA SATELLITE..' 36-MO MULTI YR
Period Obligations
 04/19/1994-04/30/1995 FY94: \$399,999 TOTAL: \$399,999
Prin. Invest. NASA Tech. Officer CASE Category
 J W MERCHANT HQ/A J TUYAHOV 39-Env Sci, NEC
 HQ/D M BUTLER

NAGW 3984 University of Nebraska - Lincoln 5599
 NEBRASKA EARTH SCIENCE EDUC NETWORK-ENHANCING THE NASA UNIV AND PRE-COLLEGE SCIENCE TEACHER CONNECTION
Period Obligations
 05/25/1994-02/28/1995 FY94: \$200,000 TOTAL: \$200,000
Prin. Invest. NASA Tech. Officer CASE Category
 D GALE HQ/E LUCIER 39-Env Sci, NEC
 D C GOSSELIN HQ/O SPAULDING
 P B WIGLEY

NCA 2-762 University of Nebraska - Lincoln 5600
 NONLINEAR FIELD PROBLEMS WITH APPLICATIONS TO AIRCRAFT STRUCTURES AND RELATED FIELDS
Period Obligations
 11/17/1992-11/30/1994 FY94: \$0 TOTAL: \$39,189
Prin. Invest. NASA Tech. Officer CASE Category
 C W MARTIN ARC/K K GUPTA 41-Aero Engr

NGT 00-030-127 University of Nebraska - Lincoln 5601
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
 10/30/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 T L MOTE HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NGT 00-051-293 University of Nebraska - Lincoln 5602
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/06/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 S E REICHENBACH HQ/D HOLLAND 22-Computer Science

NGT 00-070-280 University of Nebraska - Lincoln 5603
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
 07/24/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 K SAVOOD LERC/F MONTEGANI 45-Elec Engr

NAG 8-221 University of Nebraska-Omaha 5604
 JOVE
Period Obligations
 01/30/1992-08/31/1994 FY94: \$28,000 TOTAL: \$87,000
Prin. Invest. NASA Tech. Officer CASE Category
 J RASLER MSFC/F SIX 51-Biological Sci
 D WILKINS

NASA'S UNIVERSITY PROGRAM **NEBRASKA (Continued)**

NGT 00-040-051 University of Nebraska-Omaha 5605
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
07/26/1991-01/31/1995 FY94: \$185,000 TOTAL: \$563,700
Prin. Invest. NASA Tech. Officer CASE Category
B B BOWEN HQ/L KEFFER 99-Multi-Discip

NAGW 3753 Univ. of Nevada - Desert Res. Inst. 5612
SOUTHERN HEMISPHERE CLOUD CONDENSATION NUCLEI
Period Obligations
09/16/1993-07/31/1995 FY94: \$98,368 TOTAL: \$154,447
Prin. Invest. NASA Tech. Officer CASE Category
J G HUDSON HQ/J T SUTTLES 31-Atmos Sci
C TWOHY HQ/A C JANETOS

NEVADA

NAG 1-1113 Univ. of Nevada - Desert Res. Inst. 5606
CLOUD CONDENSATION NUCLEI MEASUREMENTS IN PROJECT FIRE
Period Obligations
03/15/1990-12/12/1994 FY94: \$85,251 TOTAL: \$329,220
Prin. Invest. NASA Tech. Officer CASE Category
J G HUDSON LARC/D S MCDUGAL 31-Atmos Sci
LARC/T L OWENS

NAS 5-31231 University of Nevada - Las Vegas 5613
STIS CO-INVESTIGATOR SUPPORT
Period Obligations
08/30/1991-03/31/1998 FY94: \$5,000 TOTAL: \$22,301
Prin. Invest. NASA Tech. Officer CASE Category
D WEISTROP GSFC/D VITAGLIANO 11-Astronomy

NGT 00-040-042 University of Nevada - Las Vegas 5614
NGT-40042/UNIV NEVADA SYSTEM/NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
05/29/1991-02/28/1995 FY94: \$170,000 TOTAL: \$663,000
Prin. Invest. NASA Tech. Officer CASE Category
J V TARANIK HQ/E T SCHWARTZ 99-Multi-Discip

NAG 1-1546 Univ. of Nevada - Desert Res. Inst. 5607
AUTOMATION OF REPLICATOR DATA ANALYSIS
Period Obligations
09/27/1993-11/30/1994 FY94: \$8,000 TOTAL: \$90,037
Prin. Invest. NASA Tech. Officer CASE Category
J HALLETT LARC/D S MCDUGAL 31-Atmos Sci
W P ARNOTT LARC/T L OWENS

NAG 5-2136 University of Nevada - Reno 5615
H95C: A MERGER CANDIDATE
Period Obligations
11/09/1992-11/14/1994 FY94: \$0 TOTAL: \$6,000
Prin. Invest. NASA Tech. Officer CASE Category
M RODRIGUE GSFC/D WEST 11-Astronomy

NAG 2-663 Univ. of Nevada - Desert Res. Inst. 5608
ER2 PARTICLE REPLICATOR
Period Obligations
08/01/1990-09/30/1994 FY94: \$20,706 TOTAL: \$249,983
Prin. Invest. NASA Tech. Officer CASE Category
J HALLETT ARC/R F PUESCHEL 31-Atmos Sci

NAGW 2347 University of Nevada - Reno 5616
GEOLOGIC MAPPING OF THE OPHIR PLANUM REGION OF MARS
Period Obligations
05/21/1991-12/31/1992 FY94: TOTAL: \$11,565
Prin. Invest. NASA Tech. Officer CASE Category
R A SCHULTZ HQ/T A MAXWELL 32-Geological Sci

NAG 2-923 Univ. of Nevada - Desert Res. Inst. 5609
CHARACTERIZATION OF AIRCRAFT PRODUCED SOOT AND CON TRAILS NEAR THE TROPOPAUSE
Period Obligations
08/10/1994-12/31/1994 FY94: \$46,750 TOTAL: \$46,750
Prin. Invest. NASA Tech. Officer CASE Category
J HALLETT ARC/E P CONDON 31-Atmos Sci
ARC/O B TOON

NAGW 2572 University of Nevada - Reno 5617
EXPERIMENTAL STUDY OF GROWTH AND PHASE CHANGE OF POLAR STRATOSPHERIC CLOUD PARTICLES
Period Obligations
09/19/1991-06/30/1993 FY94: \$0 TOTAL: \$59,268
Prin. Invest. NASA Tech. Officer CASE Category
J HALLETT HQ/M J KURYLO 31-Atmos Sci
HQ/R T WATSON

NAGW 1947 Univ. of Nevada - Desert Res. Inst. 5610
EXOBIOLGY SITE SELECTION FOR FUTURE MARS MISSIONS : MARTIAN PALEOLAKE SEDIMENTS AND TERRESTRIAL ANAL.
Period Obligations
04/27/1990-11/14/1995 FY94: \$110,000 TOTAL: \$511,986
Prin. Invest. NASA Tech. Officer CASE Category
R A WHARTON HQ/J D RUMMEL 54-Env Biology

NCA 2-799 University of Nevada - Reno 5618
PALEOLAKES ON MARS AND TERRESTRIAL ANALOGS: COMPARATIVE STUDY OF ANTARCTIC LAKES
Period Obligations
03/15/1993-06/01/1994 FY94: \$0 TOTAL: \$21,868
Prin. Invest. NASA Tech. Officer CASE Category
R A WHARTON ARC/C R STOKER 32-Geological Sci
S TYLER ARC/C P MCKAY

NAGW 2562 Univ. of Nevada - Desert Res. Inst. 5611
DEVELOPMENT OF AN EOS ORIENTED INFORMATION SYSTEM FOR GEOSCIENCE INVESTIGATIONS IN ARID LANDS
Period Obligations
07/26/1991-12/31/1993 FY94: \$0 TOTAL: \$249,347
Prin. Invest. NASA Tech. Officer CASE Category
J V TARANIK HQ/A J TUYAHOV 32-Geological Sci
D A MOUNT HQ/J C DODGE

NCC 2-507 University of Nevada - Reno 5619
NUMERICAL INVESTIGATIONS IN THREE-DIMENSIONAL INTIFLOWS
Period Obligations
10/01/1987-12/31/1994 FY94: \$53,177 TOTAL: \$322,066
Prin. Invest. NASA Tech. Officer CASE Category
W C ROSE ARC/D P BENCZE 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
NEW HAMPSHIRE**

NEW HAMPSHIRE

NAG 2-936 Dartmouth College 5620
SCORPIO: A TESTBED FOR TOMORROW'S MULTIPROCESSOR FILE SYSTEMS

<i>Period</i>	<i>Obligations</i>	
09/29/1994-08/31/1995	FY94: \$99,990	TOTAL: \$99,990
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D F KOTZ	ARC/B T BLAYLOCK	22-Computer Science

NAG 5-663 Dartmouth College 5621
SUBORBITAL PROGRAM IN MAGNETOSPHERIC AND IONOSPHERIC PHYSICS

<i>Period</i>	<i>Obligations</i>	
03/28/1990-03/31/1995	FY94: \$4,999	TOTAL: \$338,526
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J W LABELLE	GSFC/L J EARLY	13-Physics
	GSFC/R H PLESS	

NAG 5-1098 Dartmouth College 5622
THEORETICAL STUDY GLOBAL GEOSPACE SYSTEM

<i>Period</i>	<i>Obligations</i>	
11/01/1988-01/31/1995	FY94: \$200,000	TOTAL: \$1,114,427
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M K HUDSON	GSFC/S A CURTIS	13-Physics
	GSFC/M H ACUNA	

NAG 5-1508 Dartmouth College 5623
SMALL SCALE STRUCTURE OF THE MAGNETO PAUSE FROM AMPTE/IRM DATA

<i>Period</i>	<i>Obligations</i>	
03/27/1991-04/14/1994	FY94: \$0	TOTAL: \$184,304
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B SONNERUP	GSFC/G D BULLOCK	19-Phys Sci, NEC

NAG 5-2138 Dartmouth College 5624
AN X-RAY STUDY OF AN OPTICAL JET FEATURE IN CTB 10 9

<i>Period</i>	<i>Obligations</i>	
11/09/1992-11/14/1994	FY94: \$32,000	TOTAL: \$41,725
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A FESEN	GSFC/R PETRE	11-Astronomy

NAG 5-2164 Dartmouth College 5625
ACCRETION POWER IN AM CVN

<i>Period</i>	<i>Obligations</i>	
12/31/1992-12/31/1994	FY94: \$0	TOTAL: \$16,827
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J R THORSTENSEN	GSFC/R PETRE	11-Astronomy

NAG 5-2252 Dartmouth College 5626
MESOSCALE PROCESSES AT MAGNETOSPHERIC BOUNDARIES AND THEIR COUPLING TO THE IONOSPHERE

<i>Period</i>	<i>Obligations</i>	
05/12/1993-01/31/1995	FY94: \$260,000	TOTAL: \$395,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W LOTKO	GSFC/T J BIRMINGHAM	13-Physics
	GSFC/J D BOHLIN	

NAG 5-2314 Dartmouth College 5627
VOYAGER 2 OBSERVATIONS OF THE GALACTIC SUPERNOVA REMNANT G65.3+5.7

<i>Period</i>	<i>Obligations</i>	
07/12/1993-07/14/1994	FY94: \$0	TOTAL: \$10,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A FESEN	GSFC/R OLIVERSEN	11-Astronomy

NAG 5-2337 Dartmouth College 5628

THE FREQUENCY AND DISTRIBUTION OF HIGH VELOCITY GAS IN THE GALAXY

<i>Period</i>	<i>Obligations</i>	
07/28/1993-07/31/1994	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A FESEN	GSFC/D WEST	11-Astronomy

NAGW 710 Dartmouth College 5629

RESEARCH ON TURBULENCE IN PLASMAS

<i>Period</i>	<i>Obligations</i>	
01/01/1985-06/30/1994	FY94: \$0	TOTAL: \$734,075
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D C MONTGOMERY	HQ/M M MELLOTT	13-Physics
	HQ/W V JONES	

NAGW 1652 Dartmouth College 5630

TIME DEPENDENT NATURE OF AURORAL PHENOMENA

<i>Period</i>	<i>Obligations</i>	
02/24/1989-06/30/1994	FY94: \$97,700	TOTAL: \$423,120
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M K HUDSON	HQ/M M MELLOTT	13-Physics
	HQ/T W PERRY	

NAGW 1824 Dartmouth College 5631

MAGNETOSPHERIC SHEAR LAYERS COUPLED TO THE IONOSPHERE

<i>Period</i>	<i>Obligations</i>	
09/06/1989-08/31/1993	FY94: \$0	TOTAL: \$251,092
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W LOTKO	HQ/M M MELLOTT	13-Physics
	HQ/T W PERRY	

NAGW 1838 Dartmouth College 5632

MICROWAVE RADAR OBSERVATIONS OF ANTARCTIC SEA ICE

<i>Period</i>	<i>Obligations</i>	
11/29/1989-09/30/1993	FY94: \$0	TOTAL: \$444,872
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K C JEZEK	HQ/R H THOMAS	39-Env Sci, NEC
R K MOORE	HQ/W S WILSON	

NAGW 2656 Dartmouth College 5633

TIDAL COUPLING IN THE IONOSPHERE

<i>Period</i>	<i>Obligations</i>	
07/15/1991-04/30/1995	FY94: \$28,000	TOTAL: \$189,646
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C G FESEN	HQ/M M MELLOTT	49-Engr, NEC
	HQ/J D BOHLIN	

NAGW 3045 Dartmouth College 5634

NAGW-3045/DARTMOUTH COLLEGE/THERMOSPHERIC NITRIC OXIDE: OBSERVATIONS AND MODELING

<i>Period</i>	<i>Obligations</i>	
04/17/1992-03/31/1995	FY94: \$55,397	TOTAL: \$158,046
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C FESEN	HQ/D L REASONER	13-Physics
	HQ/J D BOHLIN	

NAGW 3227 Dartmouth College 5635

SOIL CARBON INVENTORY AND CARBON FLUX RESPONSES TO LANDUSE CHANGE, NORTHERN NEW ENGLAND

<i>Period</i>	<i>Obligations</i>	
10/26/1992-10/31/1994	FY94: \$75,453	TOTAL: \$230,453
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R BRAKENRIDGE	HQ/M BALTUCK	32-Geological Sci

**NASA'S UNIVERSITY PROGRAM
NEW HAMPSHIRE (Continued)**

NAGW 3506 Dartmouth College 5636
REGIONAL GEOLOGY AND TECTONICS OF THE V26 AND V38
QUADRANGLES, VENUS
Period Obligations
04/09/1993-03/31/1995 FY94: \$21,600 TOTAL: \$51,600
Prin. Invest. NASA Tech. Officer CASE Category
G R BRAKENRIDGE HQ/J T BERGSTRALH 32-Geological Sci

NAGW 3972 Dartmouth College 5637
COMBINED SIMULATION MODEL FOR MAGNETOSPHERE GLOBAL
MHD MEETS THE RICE CONVECTION MODEL
Period Obligations
04/28/1994-03/31/1995 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
J G LYON HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 3989 Dartmouth College 5638
OBLIQUE ALFVEN DYNAMICS OF THE PLASMA SHEET IONO- SPHERE
INTERACTION
Period Obligations
05/13/1994-04/30/1995 FY94: \$68,479 TOTAL: \$68,479
Prin. Invest. NASA Tech. Officer CASE Category
W LOTKO HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 4003 Dartmouth College 5639
THE ROLE OF HYDROTHERMAL PROCESSES IN SHAPING
Period Obligations
05/17/1994-02/28/1997 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
G R BRAKENRIDGE HQ/R WILLIAMS 32-Geological Sci

NAGW 4023 Dartmouth College 5640
SMALL SCALE STRUCTURE OF THE MAGNETOPAUSE
Period Obligations
05/24/1994-01/31/1995 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
B SONNERUP HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAS 5-38056 Dartmouth College 5641
SCIENCE SUPPORT FOR TIMED TEMPERATURE WIND, NEUTRALS
AND IONS EXPERIMENT
Period Obligations
06/24/1994-06/24/1996 FY94: \$12,200 TOTAL: \$12,200
Prin. Invest. NASA Tech. Officer CASE Category
C G FESEN GSFC/E A SCHMIDT 49-Engr, NEC

NCC 2-849 Dartmouth College 5642
CHARACTERIZING THE WORKLOAD OF MULTIPROCESSOR FILE
SYSTEMS
Period Obligations
04/13/1994-09/30/1994 FY94: \$49,629 TOTAL: \$49,629
Prin. Invest. NASA Tech. Officer CASE Category
D F KOTZ ARC/R L CARTER 22-Computer Science

NGT 00-050-798 Dartmouth College 5643
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/01/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
B SONNERUP HQ/F C OWENS 45-Elec Engr

NGT 00-050-810 Dartmouth College 5644
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/25/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
G WEGNER HQ/F C OWENS 11-Astronomy

NGT 00-050-936 Dartmouth College 5645
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/15/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J LABELLE HQ/J K ALEXANDER 13-Physics

NGT 00-051-160 Dartmouth College 5646
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/22/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
D KOTZ HQ/P HUNTER 29-Math/Computer, NEC

NAG 1-1233 University of New Hampshire - Durham 5647
MEASUREMENTS OF NITRIC ACID, CARBOXYLIC ACIDS, AND
SELECTED AEROSOL SPECIES FOR THE NASA/GTE PACIFIC
Period Obligations
04/09/1991-05/31/1995 FY94: \$150,000 TOTAL: \$748,092
Prin. Invest. NASA Tech. Officer CASE Category
R W TALBOT LARC/J M HOELL 43-Chem Engr
J E DIBB LARC/B ANDERSON
O KLEMM

NAG 3-1181 University of New Hampshire - Durham 5648
HOLLOW CATHODE PARTICLE DIAGNOSTICS
Period Obligations
06/12/1990-02/10/1995 FY94: \$50,000 TOTAL: \$404,693
Prin. Invest. NASA Tech. Officer CASE Category
R B TORBERT LERC/J T GALOFARO 13-Physics
C A KLETZING

NAG 3-1599 University of New Hampshire - Durham 5649
SUITABILITY OF ELECTRIC FIELD AND PARTICLE MEASUREMENT
FOR TROPIX-LIKE MISSION
Period Obligations
06/01/1994-05/31/1995 FY94: \$10,180 TOTAL: \$10,180
Prin. Invest. NASA Tech. Officer CASE Category
R B TORBERT LERC/J M HICKMAN 13-Physics

NAG 5-656 University of New Hampshire - Durham 5650
RAPIDLY VARYING SPACE PLASMA PHENOMENA
Period Obligations
06/01/1989-12/31/1994 FY94: \$25,000 TOTAL: \$692,640
Prin. Invest. NASA Tech. Officer CASE Category
R B TORBERT GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-678 University of New Hampshire - Durham 5651
WISP II: A PROPOSAL TO REFLY WISP
Period Obligations
04/10/1991-04/30/1994 FY94: \$0 TOTAL: \$239,026
Prin. Invest. NASA Tech. Officer CASE Category
R L ARNOLDY GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NASA'S UNIVERSITY PROGRAM **NEW HAMPSHIRE (Continued)**

NAG 5-692 University of New Hampshire - Durham 5652 **SOUNDING OF THE CLEFT ION FOUNDATION ENERGIZATION REGION**

<i>Period</i>	<i>Obligations</i>	
05/26/1992-05/31/1995	FY94: \$149,135	TOTAL: \$208,580
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R ARNOLDY	WFF/L J EARLY	13-Physics
	WFF/R H PLESS	

NAG 5-2289 University of New Hampshire - Durham 5659 **MAGNITUDE AND CONTROL OF TRACT GAS EXCHANGE IN BOR EAL OCESYSTEMS**

<i>Period</i>	<i>Obligations</i>	
06/14/1993-07/14/1994	FY94: \$116,237	TOTAL: \$190,795
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P M CRILL	GSFC/F G HALL	39-Env Sci, NEC
	GSFC/P SELLERS	

NAG 5-1426 University of New Hampshire - Durham 5653 **ANALYSIS OF DPU ARCHITECTURE AND SOFTWARE**

<i>Period</i>	<i>Obligations</i>	
09/10/1990-03/14/1993	FY94: \$0	TOTAL: \$405,722
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R B TORBERT	GSFC/J D SCUDDER	19-Phys Sci, NEC

NAG 5-2290 University of New Hampshire - Durham 5660 **MODELING CLIMATE-BIOSPHERE INTERACTIONS IN THE BOR EAL FOREST**

<i>Period</i>	<i>Obligations</i>	
06/14/1993-06/14/1995	FY94: \$71,000	TOTAL: \$105,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R C HARRISS	GSFC/F G HALL	39-Env Sci, NEC
	GSFC/P SELLERS	

NAG 5-1479 University of New Hampshire - Durham 5654 **THEORETICAL STUDIES ON THE CHROMOSPHERE, CORONA, AND SOLAR WIND**

<i>Period</i>	<i>Obligations</i>	
11/26/1990-03/14/1995	FY94: \$330,000	TOTAL: \$1,210,070
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J V HOLLWEG	GSFC/T J BIRMINGHAM	13-Physics
M A LEO		

NAG 5-2350 University of New Hampshire - Durham 5661 **DETERMINING THE CHARACTERISTICS OF SOLAR MICROFLAR ES WITH BATSE**

<i>Period</i>	<i>Obligations</i>	
08/12/1993-02/28/1995	FY94: \$60,000	TOTAL: \$74,065
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M RYAN	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-1548 University of New Hampshire - Durham 5655 **PARTICLE ACCELERATION AND TRANSPORT IN THE TAIL AN D AT THE FRONT SIDE OF THE MAGNETOSPHERE**

<i>Period</i>	<i>Obligations</i>	
04/17/1991-04/30/1994	FY94: \$0	TOTAL: \$334,845
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E MOBIUS	GSFC/G D BULLOCK	19-Phys Sci, NEC

NAG 5-2388 University of New Hampshire - Durham 5662 **INVESTIGATION OF BATSE SENSITIVITY TO POLARIZED GA MMA-RADIATION**

<i>Period</i>	<i>Obligations</i>	
10/06/1993-10/14/1994	FY94: \$39,963	TOTAL: \$39,963
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M L MCCONNELL	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-1561 University of New Hampshire - Durham 5656 **PROBING SOLAR PARTICLE ACCELERATION DURING THE 22N D SOLAR MAXIMUM WITH GRO/OSSE**

<i>Period</i>	<i>Obligations</i>	
04/17/1991-11/14/1994	FY94: \$55,000	TOTAL: \$238,015
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W T VESTRAND	GSFC/J P NORRIS	11-Astronomy
	GSFC/D A KNIFFEN	

NAG 5-2420 University of New Hampshire - Durham 5663 **USE OF EGRET HIGH ENERGY CAPABILITY TO INVESTIGATE ENERGETIC SOLAR FLARE PROCESSES**

<i>Period</i>	<i>Obligations</i>	
11/06/1993-11/14/1994	FY94: \$15,500	TOTAL: \$15,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E CHUPP	GSFC/J P NORRIS	11-Astronomy
D L BERTSCH	GSFC/N WHITE	

NAG 5-1562 University of New Hampshire - Durham 5657 **A STATISTICAL APPROACH TO SOLAR FLARE SPECTRAL ANA LYSIS WITH BATSE**

<i>Period</i>	<i>Obligations</i>	
04/17/1991-11/14/1993	FY94: \$0	TOTAL: \$160,750
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D J FORREST	GSFC/J P NORRIS	11-Astronomy
	GSFC/D A KNIFFEN	

NAG 5-2731 University of New Hampshire - Durham 5664 **FRACTAL AND WAVELET INVESTIGATIONS OF BURST AND TRANSIENT DATA**

<i>Period</i>	<i>Obligations</i>	
09/21/1994-09/30/1995	FY94: \$15,000	TOTAL: \$15,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D C MEREDITH	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2172 University of New Hampshire - Durham 5658 **SUPPORT OF A WORKSHOP ON A NEW ERA OF HIGH ENERGY SOLAR FLARE MEASUREMENTS**

<i>Period</i>	<i>Obligations</i>	
01/14/1993-09/30/1993	FY94: \$0	TOTAL: \$20,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M RYAN	GSFC/J P NORRIS	11-Astronomy
W T VESTRAND	GSFC/N WHITE	

NAG 5-5007 University of New Hampshire - Durham 5665 **AMICIST NEW AWARD**

<i>Period</i>	<i>Obligations</i>	
05/12/1993-12/31/1994	FY94: \$202,820	TOTAL: \$262,315
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R ARNOLDY	GSFC/L J EARLY	13-Physics
	GSFC/R H PLESS	

**NASA'S UNIVERSITY PROGRAM
NEW HAMPSHIRE (Continued)**

NAG 5-5010 University of New Hampshire - Durham 5666
PARTICLE MEASUREMENTS ABOVE AN ACTIVE THUNDERSTORM
PARTICLE MEASUREMENTS ABOVE AN ACTIVE THUNDERSTORM
Period *Obligations*
05/12/1993-12/31/1994 FY94: \$67,165 TOTAL: \$96,990
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C KLETZING GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 6-12 University of New Hampshire - Durham 5667
GRANT AWARD
Period *Obligations*
04/23/1981-06/30/1994 FY94: \$0 TOTAL: \$2,012,389
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R L ARNOLDY GSFC/L J EARLY 19-Phys Sci, NEC
R L KAUFMANN GSFC/R H PLESS

NAG 8-853 University of New Hampshire - Durham 5668
GEOSIS/WETNET
Period *Obligations*
10/04/1990-10/14/1993 FY94: TOTAL: \$100,149
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B ROCK MSFC/J LUVALL 31-Atmos Sci

NAG 8-1044 University of New Hampshire - Durham 5669
WETNET STUDIES
Period *Obligations*
05/06/1994-05/16/1995 FY94: \$60,724 TOTAL: \$60,724
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B N ROCK MSFC/J LOVALL 31-Atmos Sci
J R GIVRI

NAGW 1245 University of New Hampshire - Durham 5670
SPECTROCHARACTERIZATION OF FOREST DECLINE DAMAGE
Period *Obligations*
04/13/1988-12/31/1994 FY94: \$88,200 TOTAL: \$805,846
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B N ROCK HQ/D E WICKLAND 39-Env Sci, NEC
HQ/M J RUZEK

NAGW 1625 University of New Hampshire - Durham 5671
ION BEAM GENERATION AND INTERACTIONS WITH THE
IONOSPHERE
Period *Obligations*
02/08/1989-01/31/1994 FY94: \$0 TOTAL: \$206,598
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R L KAUFMAN HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 1726 University of New Hampshire - Durham 5672
SOURCES OF ATMOSPHERIC METHANE IN TH TROPICS
Period *Obligations*
04/11/1989-06/30/1995 FY94: \$0 TOTAL: \$363,515
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R HARRISS HQ/M M AVERNER 54-Env Biology

NAGW 1825 University of New Hampshire - Durham 5673
NITROGEN SATURATION IN FOREST ECOSYSTEMS A REGIONAL
ASSESSMENT OF EFFECTS ON NITROUS OXIDE AND METH
Period *Obligations*
01/12/1990-12/31/1993 FY94: \$0 TOTAL: \$626,348
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D ABER HQ/D E WICKLAND 39-Env Sci, NEC
HQ/R E MURPHY

NAGW 1826 University of New Hampshire - Durham 5674
ATMOSPHERIC METHANE SOURCES IN NORTHERN
ENVIRONMENTS
Period *Obligations*
09/06/1989-12/31/1993 FY94: \$0 TOTAL: \$544,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C HARRISS HQ/M J KURYLO 31-Atmos Sci
HQ/R T WATSON

NAGW 1888 University of New Hampshire - Durham 5675
NAGW-1888/UNIV NEW HAMPSHIRE/LINKING SATELLITE DATA TO
MODELS OF HYDROLOGY, TERRESTRIAL ECOSYSTEM
Period *Obligations*
12/12/1989-03/31/1993 FY94: \$0 TOTAL: \$534,772
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B MOORE HQ/D E WICKLAND 39-Env Sci, NEC
B CHOUDHURY HQ/R E MURPHY

NAGW 2043 University of New Hampshire - Durham 5676
NAGW-2043/UNIV. OF NEW HAMPSHIRE/SECOND YEAR EFFORT IN
AN INVESTIGATION OF A NEW SPACE PLASMA I
Period *Obligations*
04/02/1990-12/31/1992 FY94: TOTAL: \$305,678
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R B TORBERT HQ/J K ALEXANDER 13-Physics
HQ/D A HOLLAND

NAGW 2294 University of New Hampshire - Durham 5677
NAGW-2294/UNV NEW HAMPSHIRE/ESTIMATING RATES OF DE
FORESTATION IN THE AMAZON BASIN USING REMOTE SENS
Period *Obligations*
10/30/1990-08/31/1994 FY94: \$0 TOTAL: \$688,369
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B MOORE HQ/S TILLFORD 39-Env Sci, NEC
D SKOLE HQ/G LESANE

NAGW 2505 University of New Hampshire - Durham 5678
KINETIC PHYSICS OF THE PLASMA SHEET BOUNDARY LAYER
Period *Obligations*
07/25/1991-05/31/1994 FY94: \$0 TOTAL: \$145,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T G ONSAGER HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 2579 University of New Hampshire - Durham 5679
STUDIES OF INTERSTELLAR PICKUP IONS IN THE SOLAR WIND
Period *Obligations*
06/26/1991-10/31/1994 FY94: \$60,000 TOTAL: \$265,985
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P A ISENBERG HQ/W V JONES 13-Physics

NAGW 2669 University of New Hampshire - Durham 5680
CHANGES IN BIOGEOCHEMICAL CYCLES: EXECUTION PHASES
Period *Obligations*
09/03/1991-12/31/1994 FY94: \$1,767,908 TOTAL: \$5,600,897
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B MOORE HQ/R E MURPHY 39-Env Sci, NEC
HQ/W S WILSON

NAGW 2697 University of New Hampshire - Durham 5681
ELECTRON BEAM EXPERIMENT COLLABORATION
Period *Obligations*
09/03/1991-08/30/1994 FY94: \$53,000 TOTAL: \$188,385
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C KLETZING HQ/E C WHIPPLE 13-Physics
R B TORBERT HQ/J D BOHLIN

**NASA'S UNIVERSITY PROGRAM
NEW HAMPSHIRE (Continued)**

NAGW 2726 University of New Hampshire - Durham 5682
FIRE SCARS IN NORTHEASTERN BRAZIL REMOTE SENSING A ND
TRACE GAS EXCHANGES

Period	Obligations	
09/09/1991-08/31/1993	FY94: \$0	TOTAL: \$135,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R C HARRISS	HQ/A C JANETOS	39-Env Sci, NEC
	HQ/R T WATSON	

NAGW 2741 University of New Hampshire - Durham 5683
SPECTRAL CHARACTERIZATION OF OZONE DAMAGE IN RED S
PRUCE AND WHITE PINE

Period	Obligations	
09/19/1991-09/30/1994	FY94: \$0	TOTAL: \$260,698
Prin. Invest.	NASA Tech. Officer	CASE Category
B N ROCK	HQ/A C JANETOS	39-Env Sci, NEC
	HQ/D E WICKLAND	

NAGW 2749 University of New Hampshire - Durham 5684
THE ROLE OF TROPICAL DEFORESTATION IN THE GLOBAL C ARBON
CYCLE: SPATIAL AND TEMPORAL DYNAMICS

Period	Obligations	
09/19/1991-08/31/1994	FY94: \$0	TOTAL: \$90,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D L SKOLE	HQ/A C JANETOS	39-Env Sci, NEC
B MOORE	HQ/R T WATSON	

NAGW 2756 University of New Hampshire - Durham 5685
A SEARCH FOR ENERGETIC ION DIRECTIVITY IN LARGE SO LAR
FLARES

Period	Obligations	
11/01/1991-10/31/1993	FY94: \$0	TOTAL: \$52,030
Prin. Invest.	NASA Tech. Officer	CASE Category
W T VESTRAND	HQ/W J WAGNER	13-Physics
	HQ/K LANG	

NAGW 2759 University of New Hampshire - Durham 5686
STUDY OF THE ELECTRON AND ION ACCELERATION PROCESS ES
BY JOINT INVERSION OF GRS AND HXRBS

Period	Obligations	
09/30/1992-10/31/1993	FY94: \$0	TOTAL: \$41,183
Prin. Invest.	NASA Tech. Officer	CASE Category
D J FORREST	HQ/W J WAGNER	13-Physics
	HQ/K LANG	

NAGW 2771 University of New Hampshire - Durham 5687
GAS EXCHANGE IN WETLANDS; CONTROLS AND REMOTE SENS
ING

Period	Obligations	
11/25/1991-10/31/1993	FY94: \$0	TOTAL: \$96,666
Prin. Invest.	NASA Tech. Officer	CASE Category
M E HINES	HQ/M M AVERNER	39-Env Sci, NEC

NAGW 3175 University of New Hampshire - Durham 5688
NAGW-3175/UNIV NEW HAMPSHIRE/PARTICLE ACCELERATION
PHENOMENA IN ASTROPHYSICAL PLASAMS

Period	Obligations	
09/12/1992-06/30/1994	FY94: \$0	TOTAL: \$28,674
Prin. Invest.	NASA Tech. Officer	CASE Category
E L CHUPP	HQ/L S LAPIANA	11-Astronomy

NAGW 3185 University of New Hampshire - Durham 5689
NAGW-3185/UNIV NEW HAMPSHIRE/LANDSAT PATHFINDER ST
REAM 1: TROPICAL DEFORESTATION MAPPING

Period	Obligations	
08/28/1992-06/30/1994	FY94: \$0	TOTAL: \$1,058,343
Prin. Invest.	NASA Tech. Officer	CASE Category
B M MOORE	HQ/M E MAIDEN	31-Atmos Sci
D L SKOLE	HQ/D M BUTLER	

NAGW 3194 University of New Hampshire - Durham 5690
NAGW-3194/UNIV NEW HAMPSHIRE/HIRIS CANOPPY CHEMIST RY
PROOF-OF-CONCEPT

Period	Obligations	
10/07/1992-05/31/1994	FY94: \$200,000	TOTAL: \$497,533
Prin. Invest.	NASA Tech. Officer	CASE Category
J ABER	HQ/A C JANETOS	39-Env Sci, NEC
	HQ/D E WICKLAND	

NAGW 3454 University of New Hampshire - Durham 5691
STUDIES USING IMP, VOYAGER AND PIONEER COSMIC RAY DATA
TO DETERMINE THE SIZE OF THE HELIOSPHERE

Period	Obligations	
03/19/1993-02/28/1995	FY94: \$32,999	TOTAL: \$66,179
Prin. Invest.	NASA Tech. Officer	CASE Category
J A LOCKWOOD	HQ/W V JONES	13-Physics
	HQ/G L WITHBROE	

NAGW 3463 University of New Hampshire - Durham 5692
CHROMOSPHERIC EVAPORATION IN MAGNETIC RECONNECTION
MODELS OF SOLAR FLARES

Period	Obligations	
03/23/1993-03/31/1995	FY94: \$31,778	TOTAL: \$61,569
Prin. Invest.	NASA Tech. Officer	CASE Category
T G FORBES	HQ/W J WAGNER	13-Physics
	HQ/J D BOHLIN	

NAGW 3512 University of New Hampshire - Durham 5693
STUDY OF THE TIME EVOLUTION OF SOLAR FLARE ELECTRO NS

Period	Obligations	
04/06/1993-01/31/1994	FY94: \$0	TOTAL: \$35,682
Prin. Invest.	NASA Tech. Officer	CASE Category
E L CHUPP	HQ/W J WAGNER	13-Physics
	HQ/J D BOHLIN	

NAGW 3538 University of New Hampshire - Durham 5694
ANALYSIS OF GAMMA RAY DATA FROM SOLAR FLARES IN CY
CLES 21 AND 22

Period	Obligations	
04/22/1993-03/31/1995	FY94: \$85,000	TOTAL: \$170,000
Prin. Invest.	NASA Tech. Officer	CASE Category
W VESTRAND	HQ/W J WAGNER	11-Astronomy
	HQ/J D BOHLIN	

NAGW 3676 University of New Hampshire - Durham 5695
A STUDY OF THE ELECTRON DRIFT INSTRUMENT ON EQUATO
R-S

Period	Obligations	
07/13/1993-04/30/1995	FY94: \$316,000	TOTAL: \$400,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R B TORBERT	HQ/E C WHIPPLE	13-Physics
	HQ/J D BOHLIN	

**NASA'S UNIVERSITY PROGRAM
NEW HAMPSHIRE (Continued)**

NAGW 3720 University of New Hampshire - Durham 5696
NEW PRODUCTION IN THE NORTH ATLANTIC DERIVED FROM
SEASONAL PATTERNS IN SEAWIFS DATA

<i>Period</i>	<i>Obligations</i>	
09/14/1993-06/30/1996	FY94: \$125,034	TOTAL: \$235,034
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J W CAMPBELL	HQ/R E MURPHY	33-Oceanography
	HQ/D M BUTLER	

NAGW 3723 University of New Hampshire - Durham 5697
STUDY OF THE EQUATORIAL MAGNETOSPHERE WITH A TIME-
OF-FLIGHT MASS SPECTROMETER

<i>Period</i>	<i>Obligations</i>	
09/07/1993-06/30/1996	FY94: \$142,000	TOTAL: \$200,901
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E MOBIUS	HQ/E C WHIPPLE	13-Physics
	HQ/J D BOHLIN	

NAGW 3761 University of New Hampshire - Durham 5698

DESIGN AND DEVELOPMENT FOR A MINUTE OF ARC GAMMA RAY
IMAGING EXPERIMENT

<i>Period</i>	<i>Obligations</i>	
10/28/1993-07/31/1994	FY94: \$65,000	TOTAL: \$65,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J RYAN	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

NAGW 3774 University of New Hampshire - Durham 5699

CONTROL OF METHANE PRODUCTION AND EXCHANGE IN NORTHERN
PEATLANDS

<i>Period</i>	<i>Obligations</i>	
10/01/1993-06/30/1995	FY94: \$208,500	TOTAL: \$208,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P M CRILL	HQ/D E WICKLAND	39-Env Sci, NEC
	HQ/A C JANETOS	

NAGW 3980 University of New Hampshire - Durham 5700

LOCALIZED IONOSPHERIC PARTICLE ACCELERATION

<i>Period</i>	<i>Obligations</i>	
05/25/1994-03/31/1996	FY94: \$20,815	TOTAL: \$20,815
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K LYNCH	HQ/M M MELLOTT	13-Physics
	HQ/J D BOHLIN	

NAS 5-26645 University of New Hampshire - Durham 5701

DEFINITION PHASE OF THE DETECTOR SUBSYSTEM FOR THE
COMPTON

<i>Period</i>	<i>Obligations</i>	
08/19/1981-06/30/1997	FY94: \$1,818,000	TOTAL: \$25,547,300
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J RYAN	GSFC/J NORRIS	11-Astronomy

NAS 5-30744 University of New Hampshire - Durham 5702

ELECTRON DRIFT EXPERIMENT AND ACTIVE SPACECRAFT
POTENTIAL

<i>Period</i>	<i>Obligations</i>	
11/22/1989-05/30/1995	FY94: \$1,660,100	TOTAL: \$9,950,600
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R TORBERT	GSFC/L CHRISTENSEN	13-Physics

NAS 5-31379 University of New Hampshire - Durham 5703

EOS INVESTIGATION: HIGH-RESOLUTION IMAGING
SPECTROMETER

<i>Period</i>	<i>Obligations</i>	
01/10/1992-06/09/1995	FY94: \$0	TOTAL: \$596,640
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J ABER	GSFC/T BRAKE	39-Env Sci, NEC

NAS 5-32062 University of New Hampshire - Durham 5704
RESEARCH STUDY FOR DEVELOPMENT OF DATABASE OF SMM
GRS

<i>Period</i>	<i>Obligations</i>	
08/18/1992-12/17/1994	FY94: \$0	TOTAL: \$143,800
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W T VESTRAND	GSFC/R OLIVERSEN	11-Astronomy

NAS 5-33002 University of New Hampshire - Durham 5705

DPU FOR PLASMA INSTRUMENT ON ISTP-WIND AND POLAR

<i>Period</i>	<i>Obligations</i>	
09/21/1993-06/04/1993	FY94: \$221,000	TOTAL: \$2,375,700
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R TORBERT	GSFC/K OGILVIE	13-Physics

NCC 1-184 University of New Hampshire - Durham 5706

ANALYSIS AND PUBLICATION OF SELECTED NASA/GTE DACOM
DATA

<i>Period</i>	<i>Obligations</i>	
08/12/1993-08/11/1994	FY94: \$0	TOTAL: \$20,854
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R C HARRISS	LARC/G W SACHSE	31-Atmos Sci

NCC 5-56 University of New Hampshire - Durham 5707

SPECTRAL CHARACTERIZATION OF VEGETATION; AIR POLLUTION
EFFECTS ON CUTICLES, AND ASSESSMENT

<i>Period</i>	<i>Obligations</i>	
09/29/1993-09/30/1995	FY94: \$41,317	TOTAL: \$41,317
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B N ROCK	GSFC/D L WILLIAMS	32-Geological Sci
	GSFC/T BRAKKE	

NGT 00-030-059 University of New Hampshire - Durham 5708

NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

<i>Period</i>	<i>Obligations</i>	
09/09/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A D NOBRE	HQ/D M BUTLER	39-Env Sci, NEC
R HARRISS	HQ/G S WILSON	

NGT 00-030-196 University of New Hampshire - Durham 5709

NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM

<i>Period</i>	<i>Obligations</i>	
08/26/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W MCDOWELL	HQ/G ASRAR	39-Env Sci, NEC
	HQ/D M BUTLER	

NGT 00-040-030 University of New Hampshire - Durham 5710

NGT-40030/UNIV NEW HAMPSHIRE/NATIONAL SPACE GRANT
COLLEGE AND FELLOWSHIP PROGRAM

<i>Period</i>	<i>Obligations</i>	
05/29/1991-02/28/1995	FY94: \$171,000	TOTAL: \$664,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D S BARETT	HQ/E T SCHWARTZ	99-Multi-Discip

NGT 00-050-610 University of New Hampshire - Durham 5711

NASA GRADUATE STUDENT RESEARCHERS PROGRAM

<i>Period</i>	<i>Obligations</i>	
07/24/1990-06/30/1994	FY94: \$0	TOTAL: \$65,990
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M RYAN	HQ/F C OWENS	13-Physics

NASA'S UNIVERSITY PROGRAM NEW HAMPSHIRE (Continued)

NGT 00-050-657 University of New Hampshire - Durham 5712
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/29/1990-08/19/1993 FY94: TOTAL: \$65,942
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R HARRISS HQ/F C OWENS 13-Physics

NGT 00-050-670 University of New Hampshire - Durham 5713
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/21/1990-08/19/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C HARRIS HQ/F C OWENS 39-Env Sci, NEC

NGT 00-050-910 University of New Hampshire - Durham 5714
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/29/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R B TORBETT HQ/J ALEXANDER 13-Physics

NGT 00-051-144 University of New Hampshire - Durham 5715
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/28/1993-08/31/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P GRILL HQ/G LESANE 43-Chem Engr

NGT 00-051-170 University of New Hampshire - Durham 5716
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/28/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M RYAN GSFC/G SOFFEN 13-Physics

NGT 00-080-009 University of New Hampshire - Durham 5717
INTERNATIONAL COLLABORATIVE EDUCATIONAL PROGRAM IN EARTH SYS
Period *Obligations*
08/03/1989-06/30/1995 FY94: \$0 TOTAL: \$439,101
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E MOORE HQ/S G TILFORD 31-Atmos Sci
J D MORRISON HQ/G A LESANE

NEW JERSEY

NAG 1-1231 Princeton University 5718
DEVELOPMENT OF FILTERED RAYLEIGH SCATTERING FOR ACCURATE MEASUREMENT OF GAS VELOCITY
Period *Obligations*
03/21/1991-09/14/1994 FY94: \$42,000 TOTAL: \$130,474
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R B MILES LARC/R R ANTCLIFF 13-Physics
W R LEMPERT

NAG 1-1501 Princeton University 5719
GUIDANCE AND CONTROL OF AN AEROSPACE PLANE
Period *Obligations*
04/09/1993-04/08/1994 FY94: TOTAL: \$34,827
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R F STENGEL LARC/W T SUIT 42-Astro Engr
LARC/D D MOEDER

NAG 2-561 Princeton University 5720
STUDIES IN ROTORCRAFT SYSTEM IDENTIFICATION
Period *Obligations*
02/03/1989-10/31/1994 FY94: \$65,000 TOTAL: \$245,420
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H C CURTISS ARC/J W FLETCHER 41-Aero Engr
R M MCKILLUP ARC/M B TISCHLER

NAG 2-784 Princeton University 5721
MESH GENERATION ENHANCEMENTS FOR SONIC BOOM PREDICTIONS
Period *Obligations*
05/06/1992-03/31/1994 FY94: \$0 TOTAL: \$142,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J BAKER ARC/S E CLIFF-HOVEY 41-Aero Engr
A JAMESON ARC/R M HICKS

NAG 2-928 Princeton University 5722
RESEARCH INTO MESH GENERATION AND GEOMETRY MODELING FOR COMPLEX CONFIGURATIONS
Period *Obligations*
09/22/1994-03/31/1995 FY94: \$85,451 TOTAL: \$85,451
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J BAKER ARC/S E CLIFF 41-Aero Engr

NAG 3-1158 Princeton University 5723
THE DYNAMICS OF DISORDER - ORDER TRANSITIONS IN HARD SPHERE COLLOIDAL DISPERSIONS
Period *Obligations*
03/29/1990-04/03/1995 FY94: \$239,670 TOTAL: \$742,670
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M CHAIKIN LERC/T K GLASGOW 47-Materials Engr
P G DEBENEDETTI

NAG 3-1182 Princeton University 5724
MICROGRAVITY STRUCTURES OF SPHERICAL AND CYLINDRICAL FLAMES IN STAGNANT AND VERTICAL ENVIRONMENTS
Period *Obligations*
06/13/1990-02/10/1995 FY94: \$100,000 TOTAL: \$420,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C K LAW LERC/D P STOCKER 46-Mech Engr

NAG 3-1231 Princeton University 5725
SCIENTIFIC SUPPORT FOR A SPACE SHUTTLE DROPLET BURNING EXPERIMENT / 6740
Period *Obligations*
01/02/1991-03/13/1995 FY94: \$171,955 TOTAL: \$657,591
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F L DRYER LERC/J B HAGGARD 49-Engr, NEC

NAG 3-1242 Princeton University 5726
STUDIES OF PREMIXED LAMINAR AND TURBULENT FLAMES AT MICROGRAVITY
Period *Obligations*
03/19/1991-10/05/1993 FY94: \$0 TOTAL: \$454,560
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P D RONNEY LERC/K J WEILAND 46-Mech Engr
V YAKHUT

NAG 3-1418 Princeton University 5727
COMBUSTION SYNTHESIS OF MATERIALS IN MICROGRAVITY
Period *Obligations*
02/05/1993-12/31/1995 FY94: \$135,000 TOTAL: \$270,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I GLASSMAN LERC/M CASTRO-CEDANO 47-Materials Engr
LERC/T K GLASGOW

**NASA'S UNIVERSITY PROGRAM
NEW JERSEY (Continued)**

NAG 3-1587 Princeton University 5728
A STUDY OF HOT SECTION CHEMICAL KINETICS FOR GAS T URBINE EMISSIONS PREDICTIONS
Period *Obligations*
04/12/1994-04/11/1995 FY94: \$187,165 TOTAL: \$187,165
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F DRYER LERC/R NIEDZWIECKI 41-Aero Engr
R YETTER

NAG 3-1614 Princeton University 5729
COLLOID PHYSICS IN MICROGRAVITY
Period *Obligations*
06/14/1994-06/13/1995 FY94: \$164,215 TOTAL: \$164,215
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M CHAIKIN LERC/T K GLASGOW 47-Materials Engr

NAG 5-616 Princeton University 5730
INTERSTELLAR MEDIUM ABSORPTION PROFILE SPECTROGRAPH (IMAPS)
Period *Obligations*
01/01/1983-10/31/1994 FY94: \$700,000 TOTAL: \$8,308,462
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E B JENKINS GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-1310 Princeton University 5731
SCIENCE VALIDATION AND COSMOLOGICAL STUDIES OF DATA COBE SAT
Period *Obligations*
11/15/1989-12/31/1994 FY94: \$72,000 TOTAL: \$440,456
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D T WILKINSON GSFC/J MATHER 11-Astronomy

NAG 5-1556 Princeton University 5732
MODELING OF THE ARCTIC ICE-OCEAN DYNAMICS AND THERMODYNAMICS
Period *Obligations*
05/01/1991-05/14/1994 FY94: \$0 TOTAL: \$55,292
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L MELLOR GSFC/S HAKKINEN 39-Env Sci, NEC

NAG 5-1628 Princeton University 5733
APPLICATIONS OF SIR-C SYNTHETIC APERTURE RADAR TO HYDROLOGY
Period *Obligations*
06/27/1991-06/30/1995 FY94: \$64,944 TOTAL: \$251,836
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E WOOD GSFC/E T ENGMAN 39-Env Sci, NEC

NAG 5-1629 Princeton University 5734
HST GTO PARTICIPATION
Period *Obligations*
07/15/1991-10/31/1994 FY94: \$223,953 TOTAL: \$710,462
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E J GROTH GSFC/S SOBIESKI 11-Astronomy

NAG 5-1714 Princeton University 5735
SPECTROSCOPY OF THE LOCAL INTERSTELLAR MEDIUM
Period *Obligations*
08/01/1991-07/31/1993 FY94: \$0 TOTAL: \$30,087
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E B JENKINS GSFC/S R HEAP 11-Astronomy
GSFC/A M SMITH

NAG 5-1769 Princeton University 5736
MODEL ATMOSPHERE ANALYSIS OF SELECTED LUMINOUS STARS
Period *Obligations*
09/17/1991-09/30/1993 FY94: TOTAL: \$2,250
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E L FLTZPATRICK GSFC/D WEST 11-Astronomy

NAG 5-1816 Princeton University 5737
PROBING NEUTRON STAR EVOLUTION WITH GAMMA RAYS
Period *Obligations*
09/30/1991-10/14/1995 FY94: \$50,000 TOTAL: \$153,218
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R WIJERS GSFC/J P NORRIS 11-Astronomy
GSFC/C A GEHRELS

NAG 5-1854 Princeton University 5738
GAMMA-RAY EMISSION FROM ACCRETING NEUTRON STARS AND GAMMA RAYS FROM RAPIDLY SPINNING PULSARS
Period *Obligations*
01/02/1992-10/31/1994 FY94: \$49,990 TOTAL: \$142,888
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M TAVANI GSFC/J P NORRIS 11-Astronomy
GSFC/C A GEHRELS

NAG 5-1875 Princeton University 5739
RADIO SOURCES AND THE CLUSTER ENVIRONMENT ATZ = 0
Period *Obligations*
02/10/1992-12/14/1995 FY94: \$15,000 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A DALY GSFC/R PETRE 11-Astronomy

NAG 5-1901 Princeton University 5740
MODELS AND SCENARIOS FOR GAMMA-RAY BURSTS
Period *Obligations*
02/20/1992-12/31/1994 FY94: \$25,000 TOTAL: \$145,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B PACZYNSKI GSFC/J NORRIS 11-Astronomy
GSFC/N GEHRELS

NAG 5-1940 Princeton University 5741
THEORETICAL STUDIES OF CRUSTAL DEFORMATION DUE TO CLACIAL, TIDAL, AND ATMOSPHERIC LOADS
Period *Obligations*
03/12/1992-03/14/1995 FY94: \$100,000 TOTAL: \$314,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W J MORGAN GSFC/B G BILLS 32-Geological Sci

NAG 5-2234 Princeton University 5742
GAMMA-RAY EMISSION FROM GLOBULAR CLUSTERS
Period *Obligations*
04/08/1993-04/14/1995 FY94: \$26,986 TOTAL: \$35,834
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M TAVANI GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2326 Princeton University 5743
SIMULATION OF BOREAL ECOSYSTEM CARBON AND WATER BUDGETS: SCALING FROM LOCAL TO REGIONAL EXTENTS
Period *Obligations*
07/16/1993-07/31/1995 FY94: \$5,000 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E WOOD GSFC/F G HALL 39-Env Sci, NEC
GSFC/P J SELLERS

**NASA'S UNIVERSITY PROGRAM
NEW JERSEY (Continued)**

NAG 5-2376 Princeton University 5744
A REDDENING AND EXTINCTION MAP AT HIGH GALACTIC LATITUDES
Period *Obligations*
09/23/1993-09/30/1995 FY94: \$62,700 TOTAL: \$62,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G R KNAPP GSFC/D WEST 11-Astronomy

NAG 5-2410 Princeton University 5745
STUDIES OF HIGH ENERGY PULSARS WITH EGRET
Period *Obligations*
10/26/1993-10/31/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J H TAYLOR GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2412 Princeton University 5746
CHARACTERIZING THE LARGE ANGULAR SCALE ANISOTROPY IN THE COSMIC MICROWAVE BACKGROUND
Period *Obligations*
10/28/1993-10/31/1994 FY94: \$35,400 TOTAL: \$35,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A PAGE GSFC/D WEST 11-Astronomy

NAG 5-2549 Princeton University 5747
ANISOTROPY OF THE COSMIC MICROWAVE BACKGROUND ON LARGE AND MEDIUM ANGULAR SCALES
Period *Obligations*
03/14/1994-03/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L PAGE GSFC/E CHENG 11-Astronomy
GSFC/R F SILVERBERG

NAG 5-2593 Princeton University 5748
X-RAY EMISSION FROM THE BE-STAR/PULSAR SYSTEM PSR 1259-63
Period *Obligations*
05/13/1994-11/14/1995 FY94: \$0 TOTAL: \$0
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M T AVANI GSFC/N WHITE 11-Astronomy

NAG 5-2693 Princeton University 5749
THE NON-AXISYMMETRIC MILKY WAY
Period *Obligations*
08/17/1994-08/31/1995 FY94: \$22,500 TOTAL: \$22,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D N SPERGEL GSFC/D WEST 11-Astronomy

NAG 5-2697 Princeton University 5750
A SEARCH FOR A MASSIVE DARK HALO OF VERY LOW MASS STARS IN THE COBE/DIRBE FULL-SKY MAPS
Period *Obligations*
08/17/1994-08/31/1995 FY94: \$10,100 TOTAL: \$10,100
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D T WILKINSON GSFC/D WEST 11-Astronomy

NAG 8-878 Princeton University 5751
DIELECTRIC AND ELECTROHYDRODYNAMIC PROPERTIES OF SUSPENSIONS
Period *Obligations*
04/22/1991-04/21/1995 FY94: \$150,000 TOTAL: \$483,052
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D SAVILLE MSFC/R SYNDER 45-Elec Engr

NAG 8-969 Princeton University 5752
STUDIES IN ELECTROHYDRODYNAMICS
Period *Obligations*
06/02/1993-03/31/1995 FY94: \$150,000 TOTAL: \$283,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A SAVILLE MSFC/R C DARTY 43-Chem Engr

NAG 8-979 Princeton University 5753
CRYSTAL STUDY
Period *Obligations*
08/10/1993-06/30/1995 FY94: \$114,595 TOTAL: \$114,595
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M H HECHT MSFC/D CARTER 19-Phys Sci, NEC

NAGW 1482 Princeton University 5754
NEW RADIOMETERS FOR BALLOON BORNE 3K ISOTROPY EXPERIMENT
Period *Obligations*
11/01/1988-11/30/1994 FY94: \$107,252 TOTAL: \$302,982
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D T WILKINSON HQ/G LEVY 13-Physics

NAGW 1763 Princeton University 5755
A STATISTICAL ANALYSIS OF SOUTH POLAR SEA ICE FORMATION
Period *Obligations*
05/16/1989-08/31/1994 FY94: \$0 TOTAL: \$292,807
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J PHELAN HQ/R H THOMAS 33-Oceanography
R D DE VEAUX HQ/W S WILSON

NAGW 1973 Princeton University 5756
ASTROPHYSICAL STUDIES
Period *Obligations*
02/21/1990-01/31/1995 FY94: \$80,000 TOTAL: \$361,565
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B T DRAINE HQ/G S LEVY 11-Astronomy

NAGW 2118 Princeton University 5757
DISTANT CLUSTERS OF GALAXIES
Period *Obligations*
05/23/1990-12/31/1994 FY94: \$89,911 TOTAL: \$384,653
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E GUNN HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2173 Princeton University 5758
HUBBLE SPACE TELESCOPICS AND X-RAY STUDIES OF GRAVITATIONAL LENSES
Period *Obligations*
06/21/1990-12/31/1994 FY94: \$93,026 TOTAL: \$375,979
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E L TURNER HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2419 Princeton University 5759
ANGULAR MOMENTUM TRANSPORT IN ASTROPHYSICAL DISKS
Period *Obligations*
08/05/1991-12/31/1994 FY94: \$45,500 TOTAL: \$309,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J GOODMAN HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

**NASA'S UNIVERSITY PROGRAM
NEW JERSEY (Continued)**

NAGW 2448 Princeton University 5760
THE UNIVERSE AT MODERATE REDSHIFT
Period Obligations
04/03/1991-01/01/1995 FY94: \$167,500 TOTAL: \$1,142,500
Prin. Invest. NASA Tech. Officer CASE Category
J P OSTRICKER HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 3741 Princeton University 5768
LANDSCAPE DYNAMICS OF NORTHEASTERN FORESTS
Period Obligations
09/14/1993-06/30/1996 FY94: \$0 TOTAL: \$54,807
Prin. Invest. NASA Tech. Officer CASE Category
S W PACALA HQ/D E WICKLAND 39-Env Sci, NEC
S A LEVIN HQ/A C JANETOS
C D CANHAN

NAGW 2538 Princeton University 5761
MULTIPLE TIME SCALE NUMERICAL SIMULATIONS ON PLASMA A
TRANSPORT AT THE EARTH'S MAGNETOPAUSE
Period Obligations
07/24/1991-10/31/1994 FY94: \$0 TOTAL: \$171,141
Prin. Invest. NASA Tech. Officer CASE Category
H OKUDA HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 3952 Princeton University 5769
SYSTEMATIC ASSESSMENT AND ANALYSIS OF TWO-DIMENSIONAL
STRATOSPHERIC OZONE MODELS
Period Obligations
04/19/1994-06/30/1997 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
H ROBITZ HQ/J A KAYE 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 2801 Princeton University 5762
A NOVEL APPLICATION OF FOURIER TRANSFORM SPECTROSCOPY
WITH HEMT AMPLIFIERS AT MICROWAVE FREQUENCIES
Period Obligations
01/03/1992-01/31/1994 FY94: \$174,987 TOTAL: \$511,864
Prin. Invest. NASA Tech. Officer CASE Category
D T WILKINSON HQ/J K ALEXANDER 11-Astronomy
HQ/D A HOLLAND

NAS 5-30110 Princeton University 5770
SPACE TELESCOPE IMAGING SPECTROGRAPH PROGRAM
Period Obligations
06/17/1987-12/31/1994 FY94: \$10,000 TOTAL: \$263,000
Prin. Invest. NASA Tech. Officer CASE Category
E JENKINS GSFC/D VITAGLINO 11-Astronomy

NAGW 3124 Princeton University 5763
THEORETICAL INVESTIGATIONS OF THE DYNAMICS OF PATTERN
AND SCALE IN SERPENTINE GRASSLAND
Period Obligations
06/29/1992-06/30/1994 FY94: \$0 TOTAL: \$185,686
Prin. Invest. NASA Tech. Officer CASE Category
S A LEVIN HQ/M M AVERNER 54-Env Biology

NAS 5-31719 Princeton University 5771
EOS INVESTIGATION OF GLOBAL HYDROLOGIC PROCESSES AND
CLIMATE
Period Obligations
10/22/1991-10/21/1996 FY94: \$185,000 TOTAL: \$631,500
Prin. Invest. NASA Tech. Officer CASE Category
E WOOD GSFC/W LAU 39-Env Sci, NEC

NAGW 3137 Princeton University 5764
NAGW-3137/PRINCETON UNIV/ASSIMILATION OF SATELLITE COLOR
OBSERVATIONS IN A COUPLED OCEAN-ECOSYSTEM
Period Obligations
07/23/1992-05/31/1994 FY94: \$132,094 TOTAL: \$287,884
Prin. Invest. NASA Tech. Officer CASE Category
J SARMIENTO HQ/R E MURPHY 33-Oceanography
HQ/J A KAYE

NGL31-1252 Princeton University 5772
AIR TRAFFIC CONTROL TECHNOLOGY \$100,000
Period Obligations
11/15/1971-01/31/1995 FY94: \$149,984 TOTAL: \$1,969,885
Prin. Invest. NASA Tech. Officer CASE Category
R F STENGEL LARC/F R MORRELL 41-Aero Engr
L M SWEET

NAGW 3233 Princeton University 5765
NAGW-3233/PRINCETON UNIV/TEACHING TEACHERS TO TEACH
HANDS-ON ASTRONOMY
Period Obligations
11/02/1992-07/31/1993 FY94: \$0 TOTAL: \$4,875
Prin. Invest. NASA Tech. Officer CASE Category
P E TURNER HQ/L LAPIANA 11-Astronomy
HQ/G P NEWTON

NGT 00-030-049 Princeton University 5773
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/09/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
D S LIN HQ/D M BUTLER 39-Env Sci, NEC
E F WOOD HQ/G S WILSON

NAGW 3589 Princeton University 5766
THE TRANSITION FROM DIAPYCNISM TO DIKE INTRUSION
Period Obligations
05/14/1993-03/31/1995 FY94: \$37,899 TOTAL: \$74,299
Prin. Invest. NASA Tech. Officer CASE Category
A M RUBIN HQ/J M BOYCE 32-Geological Sci

NGT 00-030-090 Princeton University 5774
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/23/1991-08/31/1993 FY94: \$0 TOTAL: \$20,748
Prin. Invest. NASA Tech. Officer CASE Category
B M LOFGREN HQ/D M BUTLER 39-Env Sci, NEC
S MANABE HQ/G S WILSON

NAGW 3706 Princeton University 5767
ANALYSIS OF DEFORMATION OF VENUS
Period Obligations
08/11/1993-04/30/1995 FY94: \$43,200 TOTAL: \$103,200
Prin. Invest. NASA Tech. Officer CASE Category
J SUPPE HQ/J T BERGSTRAHL 32-Geological Sci

NGT 00-030-197 Princeton University 5775
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/27/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
S G PHILANDER HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

**NASA'S UNIVERSITY PROGRAM
NEW JERSEY (Continued)**

NGT 00-030-264 Princeton University 5776
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/21/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Pnn Invest NASA Tech. Officer CASE Category
S W PASCALA HQ/A C JANETOS 33-Oceanography
HQ/G ASRAR

NGT 00-050-622 Princeton University 5777
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/12/1990-06/30/1993 FY94: \$0 TOTAL: \$66,000
Pnn Invest NASA Tech. Officer CASE Category
M DRAGOVAN HQ/F C OWENS 13-Physics

NGT 00-050-826 Princeton University 5778
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Pnn Invest NASA Tech. Officer CASE Category
R B MILES HQ/F C OWENS 13-Physics

NGT 00-051-073 Princeton University 5779
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/24/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn Invest NASA Tech. Officer CASE Category
D A SAVILLE HQ/B CARPENTER 43-Chem Engr

NGT 00-051-140 Princeton University 5780
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/29/1993-06/31/1996 FY94: \$0 TOTAL: \$22,000
Pnn Invest NASA Tech. Officer CASE Category
C GROSS HQ/R WHITE 56-Medical Sciences

NGT 00-051-295 Princeton University 5781
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/06/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn Invest NASA Tech. Officer CASE Category
N A BAHCALL HQ/D HOLLAND 11-Astronomy

NGT 00-051-343 Princeton University 5782
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn Invest NASA Tech. Officer CASE Category
D A SAVILLE HQ/G A LESANE 43-Chem Engr

NGT 00-070-289 Princeton University 5783
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
06/25/1992-06/30/1994 FY94: TOTAL: \$33,949
Pnn Invest NASA Tech. Officer CASE Category
G KARNIADAKIS HQ/D K RUSSELL 22-Computer Science

NGT 00-090-226 Princeton University 5784
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period Obligations
09/17/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Pnn Invest NASA Tech. Officer CASE Category
H MCCULLOCH HQ/D K RUSSELL 99-Multi-Discip

NAG 8-995 Rowan College of New Jersey 5785
JOVE
Period Obligations
11/19/1993-05/31/1995 FY94: \$40,813 TOTAL: \$40,813
Pnn Invest NASA Tech. Officer CASE Category
V BROWN MSFC/F SIX 51-Biological Sci

NAG 2-645 Rutgers State University - New Brunswick 5786
AI AND DESIGN: COMPUTER AIDED PRODUCTIVITY (CAP)
Period Obligations
06/20/1990-06/30/1993 FY94: \$0 TOTAL: \$1,914,683
Pnn Invest NASA Tech. Officer CASE Category
S AMAREL ARC/P E FRIEDLAND 22-Computer Science
L STEINBERG

NAG 2-668 Rutgers State University - New Brunswick 5787
CONTENT ADDRESSABLE MEMORY PROJECT
Period Obligations
08/13/1990-12/31/1994 FY94: \$256,000 TOTAL: \$1,284,489
Pnn Invest NASA Tech. Officer CASE Category
S Y LEVY ARC/H LUM 22-Computer Science
J S HALL ARC/D MCKELLAR

NAG 2-798 Rutgers State University - New Brunswick 5788
DEVELOPMENT OF A TWO-EQUATION TURBULENCE MODEL FOR
HYPERSONIC FLOWS
Period Obligations
08/24/1992-10/31/1994 FY94: \$52,966 TOTAL: \$128,581
Pnn Invest NASA Tech. Officer CASE Category
D D KNIGHT ARC/T J COAKLEY 41-Aero Engr
ARC/J G MARVIN

NAG 2-817 Rutgers State University - New Brunswick 5789
ARTIFICIAL INTELLIGENCE AND DESIGN OF AEROSPACE VEHIC
LES
Period Obligations
12/18/1992-11/30/1994 FY94: \$324,336 TOTAL: \$461,770
Pnn Invest NASA Tech. Officer CASE Category
S AMAREL ARC/G H KIDWELL 41-Aero Engr
L STEINBERG ARC/H MIURA

NAG 2-829 Rutgers State University - New Brunswick 5790
FEATRUE ISOLATION AND QUANTIFICATION OF EVOLVING DAT
ASETS
Period Obligations
03/25/1993-01/31/1995 FY94: \$89,776 TOTAL: \$179,447
Pnn Invest NASA Tech. Officer CASE Category
D SILVER ARC/T A LASINSKI 22-Computer Science

NAG 9-26 Rutgers State University - New Brunswick 5791
BERYLLIUM ISOTOPES IN METEORITES
Period Obligations
02/01/1983-03/01/1994 FY94: \$0 TOTAL: \$359,762
Pnn Invest NASA Tech. Officer CASE Category
G F HERZOG JSC/I D BROWNE 11-Astronomy
T H KRUSE

**NASA'S UNIVERSITY PROGRAM
NEW JERSEY (Continued)**

NAG 9-35	Rutgers State University - New Brunswick	5792	NGT 00-030-164	Rutgers State University - New Brunswick	5799
METAL SILICATE RELATIONSHIPS			NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
02/01/1983-02/01/1994	FY94: \$0	TOTAL: \$488,781	08/26/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R H HEWINS	JSC/I D BROWNE	32-Geological Sci	D A ROBINSON	HQ/G ASRAR	39-Env Sci, NEC
				HQ/D M BUTLER	
NAG 9-304	Rutgers State University - New Brunswick	5793	NGT 00-050-836	Rutgers State University - New Brunswick	5800
PETROLOGY OF POLYMICT BECCIASON THE MOON			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
08/01/1988-11/01/1994	FY94: \$0	TOTAL: \$93,115	08/01/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J S DELANEY	JSC/I D BROWNE	32-Geological Sci	R H HEWINS	HQ/F C OWENS	32-Geological Sci
NAGW 3391	Rutgers State University - New Brunswick	5794	NGT 00-051-150	Rutgers State University - New Brunswick	5801
SIMULATION AND ANALYSIS OF METEORIC MATERIALS			GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
03/19/1993-02/28/1995	FY94: \$105,000	TOTAL: \$192,551	06/23/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R H HEWINS	HQ/H C BRINTON	13-Physics	J M WIENCEK	HQ/D A HOLLAND	43-Chem Engr
NAGW 4109	Rutgers State University - New Brunswick	5795	NAGW 3499	Rutgers State University - Newark	5802
PRODUCTION OF TOMATOES IN TISSUE CULTURE			COSMOGENIC RADIONUCLIDES IN EXTRATERRESTRIAL MATERIALS		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
08/30/1994-06/30/1995	FY94: \$66,000	TOTAL: \$66,000	05/12/1993-02/28/1995	FY94: \$55,733	TOTAL: \$114,399
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H W JANES	HQ/M M AVERNER	55-Agriculture Sci	G F HERZOG	HQ/J BOYCE	32-Geological Sci
NCA 2-664	Rutgers State University - New Brunswick	5796	NAG 1-1559	Rutgers State University - Piscataway	5803
CONTROLLED ENVIRONMENT INTERCROPPING OF LETTUCE AND TOMATOES			STOCHASTIC METHODS FOR AIRCRAFT DESIGN MY 1/3		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
10/07/1991-12/31/1993	FY94: \$0	TOTAL: \$69,936	02/14/1993-02/13/1995	FY94: \$196,300	TOTAL: \$196,300
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H W JANES	ARC/R D MACELROY	55-Agriculture Sci	R B PELZ	LARC/D H RUDY	41-Aero Engr
			M M OGOT	LARC/M D SALOS	
NCC 2-802	Rutgers State University - New Brunswick	5797	NAG 3-1453	Rutgers State University - Piscataway	5804
PROTOCOL AND RECORD FOR SCIENTIFIC MODEL DEVELOPMENT			OSCILLATORY THERMOCAPILLARY CONVECTION		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
05/20/1993-10/31/1994	FY94: \$91,246	TOTAL: \$121,246	02/11/1993-02/07/1995	FY94: \$71,089	TOTAL: \$140,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T ELLMAN	ARC/P E FRIEDLAND	22-Computer Science	A ZEBIB	LERC/R L THOMPSON	46-Mech Engr
	ARC/D E THOMPSON				
NGT 00-030-063	Rutgers State University - New Brunswick	5798	NAG 8-975	Rutgers State University - Piscataway	5805
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			THERMAL OPTIMIZATION OF GROWTH AND QUALITY OF PROTEIN CRYSTALS		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
09/19/1991-03/31/1995	FY94: \$0	TOTAL: \$66,000	06/21/1993-06/14/1995	FY94: \$140,000	TOTAL: \$280,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M G HUGHES	HQ/D M BUTLER	39-Env Sci, NEC	J M WIENCEK	MSFC/M L PUSEY	12-Chemistry
D ROBINSON	HQ/G S WILSON		E ARNOLD		
NAGW 2263	Rutgers State University - Piscataway	5806	NGT 00-030-063	Rutgers State University - New Brunswick	5798
TRANSIENT HEATING IN THE SOLAR ACCRETION DISK			NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
02/26/1991-10/31/1993	FY94: \$35,000	TOTAL: \$185,000	09/19/1991-03/31/1995	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R H HEWINS	HQ/J A NUTH	19-Phys Sci, NEC	M G HUGHES	HQ/D M BUTLER	39-Env Sci, NEC
			D ROBINSON	HQ/G S WILSON	

NASA'S UNIVERSITY PROGRAM **NEW JERSEY (Continued)**

NAGW 2658 Rutgers State University - Piscataway 5807
NAGW-2658/RUTGERS UNIV/A PARAMETERIZATION OF SUBGR
ID-SCALE LAND-ATMOSPHERE INTERACTIONS FOR ATOMSPH
Period *Obligations*
09/20/1991-12/31/1993 FY94: \$0 TOTAL: \$129,048
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R AVISSAR HQ/R H WARING 31-Atmos Sci
HQ/R E MURPHY

NAGW 3568 Rutgers State University - Piscataway 5808
KINEMATICS OF NORTHERN HEMISPHERE SNOW COVER AND R
ESULTANT IMPACTS ON SURFACE ALBEDO
Period *Obligations*
05/13/1993-04/30/1996 FY94: \$81,394 TOTAL: \$165,079
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A ROBINSON HQ/R H THOMAS 39-Env Sci, NEC
HQ/R A SCHIFFER

NAGW 3649 Rutgers State University - Piscataway 5809
PETROLOGY AND TRACE ELEMENT GEOCHEMISTRY OF POLYMI
CT BRECCIAS AND CONSTITUENT LITHOLOGIES
Period *Obligations*
06/08/1993-01/01/1995 FY94: \$0 TOTAL: \$14,696
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J DELANEY HQ/RAHE 32-Geological Sci

NGT 00-030-070 Rutgers State University - Piscataway 5810
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/06/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S S LUQUE HQ/D M BUTLER 39-Env Sci, NEC
R LATHROP HQ/G S WILSON

NGT 00-050-707 Rutgers State University - Piscataway 5811
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/04/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T WEI HQ/F C OWENS 46-Mech Engr

NGT 00-051-352 Rutgers State University - Piscataway 5812
GRADUATE STUDENT RESEARCHERS PROGRAM,
Period *Obligations*
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M WIENCEK HQ/G A LESANE 43-Chem Engr

NGT 00-051-353 Rutgers State University - Piscataway 5813
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/18/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M WIENCEK HQ/G A LESANE 43-Chem Engr

NAGW 1877 Stevens Institute of Technology 5814
CAMDEN MIDDLE SCHOOL PROGRAM MATHEMATICS SCIENCE A
ND COMPUTER PROJECT
Period *Obligations*
02/07/1990-06/30/1995 FY94: \$0 TOTAL: \$277,421
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T G WILLIAMS HQ/B L WHITE 29-Math/Cmputer, NEC
HQ/A LUDI

NGT 00-040-032 Stevens Institute of Technology 5815
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRA M
Period *Obligations*
06/05/1991-02/28/1995 FY94: \$170,000 TOTAL: \$660,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D RICHMAN HQ/E T SCHWARTZ 99-Multi-Discip

NAG 9-567 Univ of Medicine And Dentistry 5816
MEDICAL AND SURGICAL EVALUATION AND CARE OF ILLNESS AND
INJURY IN SPACE
Period *Obligations*
12/18/1991-05/01/1994 FY94: \$0 TOTAL: \$184,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J SIEGEL JSC/R BILICA 56-Medical Sciences

NAS 9-17276 Univ of Medicine And Dentistry 5817
STUDY-PROTEIN METABOLISM DURING SPACE FL
Period *Obligations*
11/01/1994-08/01/1994 FY94: \$50,000 TOTAL: \$1,814,085
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P STEIN JSC/K NEWKIRK 56-Medical Sciences

NAS 9-18775 Univ of Medicine And Dentistry 5818
MEASUREMENT OF ENERGY EXPENDITURE DURING SPACE FLT
Period *Obligations*
10/09/1992-04/01/1997 FY94: \$18,000 TOTAL: \$78,231
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T P STEIN JSC/J VILLARREAL 59-Life Sci, NEC

NEW MEXICO

NAG 2-4004 New Mexico Highlands University 5819
AUTOMATED CONTROL OF LASER SPECTROMETRY UTILIZED I N
FLOW VISUALIZATION
Period *Obligations*
01/31/1994-12/01/1994 FY94: \$14,158 TOTAL: \$14,158
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G R GALLEGOS ARC/J DEL FRATE 41-Aero Engr

NAG 8-196 New Mexico Highlands University 5820
JOINT VENTURE
Period *Obligations*
04/29/1991-06/01/1993 FY94: \$0 TOTAL: \$99,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B TAYLOR MSFC/F SIX 19-Phys Sci, NEC
B CLARK MSFC/C R CHAPPELL

NAGW 4078 New Mexico Highlands University 5821
ALLIANCE FOR NONLINEAR OPTICS
Period *Obligations*
07/14/1994-05/30/1995 FY94: \$399,969 TOTAL: \$399,969
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R D CLARK HQ/B L WHITE 19-Phys Sci, NEC

NGT 00-090-070 New Mexico Highlands University 5822
INTEGRATED APPROACH TO ENGINEERING EDUCATION IN A
MINORITY
Period *Obligations*
09/29/1992-12/31/1994 FY94: \$180,567 TOTAL: \$329,275
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H W TAYLOR HQ/B WHITE 99-Multi-Discip

**NASA'S UNIVERSITY PROGRAM
NEW MEXICO (Continued)**

NGT 00-090-237 New Mexico Highlands University 5823
NATIVE AMER. S CIENCE AND TECH EDUCATION CONSORTIUM
Period Obligations
10/19/1993-09/30/1994 FY94: \$1,140,161 TOTAL: \$1,140,161
Prin. Invest. NASA Tech. Officer CASE Category
G SANCHEZ HQ/D RUSSELL 76-Sociology

NAG 5-767 New Mexico Institute of Mining & Tech 5824
THE DEATH WATCH: MONITORING THE MOST MASSIVE STAR S IN
THE LMC AND THE GALAXY
Period Obligations
05/01/1986-02/28/1994 FY94: \$0 TOTAL: \$199,084
Prin. Invest. NASA Tech. Officer CASE Category
D J RAYMOND GSFC/D WEST 11-Astronomy
D N BROWN
G SONNEBORN

NAG 5-5004 New Mexico Institute of Mining & Tech 5825
DESIGN AND PRODUCTION OF SHAPED CHARGES HAVING CALCIUM
LINER
Period Obligations
04/15/1993-04/14/1995 FY94: \$12,504 TOTAL: \$32,088
Prin. Invest. NASA Tech. Officer CASE Category
P PERSSON GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 8-66 New Mexico Institute of Mining & Tech 5826
GRANT ENTITLED 'CLOUD LIGHTNING OBSERVATIONS FROM U-2
AIRCRAFT.'
Period Obligations
05/12/1986-10/21/1994 FY94: \$0 TOTAL: \$246,734
Prin. Invest. NASA Tech. Officer CASE Category
M BROOK MSFC/R BLAKESLEE 45-Elec Engr
MSFC/H J CHRISTIAN

NCC 1-142 New Mexico Institute of Mining & Tech 5827
A STUDY OF VARIATIONS OF NITROGEN DIOXIDE USING SME AND
SAGE DATA.
Period Obligations
06/18/1990-12/31/1993 FY94: \$0 TOTAL: \$44,999
Prin. Invest. NASA Tech. Officer CASE Category
R J THOMAS LARC/J M ZAWODNY 31-Atmos Sci

NCC 2-364 New Mexico Institute of Mining & Tech 5828
EVOLUTION OF PHOTON AND PARTICLE SPECTRA IN COMPA
LUMINOUS OBJECTS
Period Obligations
10/01/1987-08/31/1995 FY94: \$27,000 TOTAL: \$114,000
Prin. Invest. NASA Tech. Officer CASE Category
J A EILEK ARC/F C WITTEBORN 11-Astronomy

NAG 3-1328 New Mexico State University - Las Cruces 5829
CHARACTERIZATION OF ADVANCED COMPOSITE MATERIALS U SING
THE ACOUSTO-ULTRASONIC NDE METHOD
Period Obligations
02/12/1992-10/31/1994 FY94: \$0 TOTAL: \$36,989
Prin. Invest. NASA Tech. Officer CASE Category
V K CHOO LERC/A VARY 47-Materials Engr

NAG 5-1491 New Mexico State University - Las Cruces 5830
TELEMETERING AND TELECOMMUNICATIONS RESEARCH
Period Obligations
12/10/1990-01/31/1995 FY94: \$777,000 TOTAL: \$3,161,076
Prin. Invest. NASA Tech. Officer CASE Category
F CARDEN GSFC/D WILSON 49-Engr, NEC
S HORAN GSFC/W H MILLER

NAG 5-1516 New Mexico State University - Las Cruces 5831
OPTICAL AND GAMMA RAY STUDY OF GRO PHASE I TARGETS
Period Obligations
04/17/1991-02/28/1995 FY94: \$51,850 TOTAL: \$117,923
Prin. Invest. NASA Tech. Officer CASE Category
B J MCNAMARA GSFC/J P NORRIS 11-Astronomy
GSFC/D A KNIFFEN

NAG 5-1737 New Mexico State University - Las Cruces 5832
ROSAT PSPC OBSERVATION OF POOR CLUSTERS CONTAINING
EXTENDED RADIO SOURCES
Period Obligations
08/15/1991-12/14/1994 FY94: \$40,000 TOTAL: \$69,000
Prin. Invest. NASA Tech. Officer CASE Category
J O BURNS GSFC/R PETRE 11-Astronomy

NAG 5-1819 New Mexico State University - Las Cruces 5833
OBSERVATIONS OF POOR GALAXY CLUSTERS WITH EXTENDED
RADIO SOURCES
Period Obligations
11/01/1991-10/31/1994 FY94: \$0 TOTAL: \$31,000
Prin. Invest. NASA Tech. Officer CASE Category
J O BURNS GSFC/R PETRE 11-Astronomy

NAG 5-1924 New Mexico State University - Las Cruces 5834
X-RAY EMISSION FROM THE EDGE-ON SPIRAL NGC4631
Period Obligations
03/04/1992-07/14/1994 FY94: \$0 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
R A WALTERBOS GSFC/R PETRE 11-Astronomy

NAG 5-2070 New Mexico State University - Las Cruces 5835
STUDY WEIGHT REDUCTION OPTIONS FOR WIZARD
Period Obligations
08/25/1992-08/31/1993 FY94: \$0 TOTAL: \$35,013
Prin. Invest. NASA Tech. Officer CASE Category
R L GOLDEN GSFC/R E STREITMATTER 13-Physics
GSFC/J F ORMES

NAG 5-2091 New Mexico State University - Las Cruces 5836
ROSAT PSPC IMAGING OF GAMMA-RAY BURST FIELDS
Period Obligations
09/02/1992-03/14/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
B J MCNAMARA GSFC/R PETRE 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
NEW MEXICO (Continued)**

NAG 5-2142 New Mexico State University - Las Cruces 5837
ADVANCED S-BAND STUDIES USING THE TDRSS COMMUNICATIONS SATELLITE
Period *Obligations*
11/23/1992-11/30/1993 FY94: \$0 TOTAL: \$96,305
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W OSBORN GSFC/W H MILLER 49-Engr, NEC

NAG 5-2426 New Mexico State University - Las Cruces 5838
A NEW APPROACH TO MODELLING THE FAR-INFRARED RADIATION IN GALAXIES
Period *Obligations*
11/10/1993-11/14/1995 FY94: \$66,600 TOTAL: \$66,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A WALTERBOS GSFC/D WEST 11-Astronomy

NAG 5-2702 New Mexico State University - Las Cruces 5839
ROSAT IMAGING OF INTER-PLANETARY NETWORK GAMMA - RAY BURST
Period *Obligations*
08/24/1994-02/29/1996 FY94: \$14,000 TOTAL: \$14,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B MCNAMARA GSFC/R PETRE 11-Astronomy

NAG 8-939 New Mexico State University - Las Cruces 5840
STUDIES OF DUST AND ULTRAVIOLET TELESCOPES ON THE MOON
Period *Obligations*
10/01/1992-10/14/1993 FY94: \$0 TOTAL: \$12,905
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J O BURNS MSFC/M E NEIN 42-Astro Engr

NAG 8-986 New Mexico State University - Las Cruces 5841
DEFINITION OF THE LUNAR ENVIRONMENT MEASUREMENT PACKAGE FOR THE LUNAR ULTRAVIOLET TRANSIT TELESCOPE
Period *Obligations*
07/29/1993-07/31/1994 FY94: \$0 TOTAL: \$9,356
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D BURNS MSFC/M E NEIN 31-Atmos Sci

NAG 9-396 New Mexico State University - Las Cruces 5842
A CONTINUING STUDY¹ OF LUNAR ASTRONOMICAL OBSERVATORIES
Period *Obligations*
08/14/1989-07/01/1993 FY94: \$0 TOTAL: \$181,654
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J O BURNS JSC/D THOMPSON 11-Astronomy

NAG 9-610 New Mexico State University - Las Cruces 5843
STUDY USE OF WHITE SANDS MISSILE RANGE AS LANDING SITE FOR SPACE CAPSULES
Period *Obligations*
06/16/1992-03/31/1995 FY94: \$0 TOTAL: \$920,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G R PARKER JSC/K HENDERSON 41-Aero Engr
B M MCCUNE

NAGW 110 New Mexico State University - Las Cruces 5844
CONTINUATION OF A COSMIC RAY RESEARCH PROGRAM USING
Period *Obligations*
08/01/1980-12/31/1994 FY94: \$362,000 TOTAL: \$2,499,813
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R L GOLDEN HQ/M M MELLOTT 11-Astronomy
HQ/W V JONES

NAGW 1802 New Mexico State University - Las Cruces 5845
LONG TERM CHANGES IN REFLECTIVITY AND LARGE SCALE MOTIONS
Period *Obligations*
07/10/1989-09/30/1994 FY94: \$76,795 TOTAL: \$315,360
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R REEBE HQ/J RAHE 11-Astronomy

NAGW 2016 New Mexico State University - Las Cruces 5846
NAGW-2016/NEW MEXICO STATE UNIV/A RESEARCH PROGRAM IN THE AREA OF COSMIC RAY PHYSICS AND RELATED LAB.
Period *Obligations*
04/04/1990-02/28/1995 FY94: \$54,000 TOTAL: \$254,110
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W R WEBBER HQ/W JONES 13-Physics
HQ/J C LING

NAGW 2630 New Mexico State University - Las Cruces 5847
THE RADIAL DISTRIBUTIONS OF FAR INFRARED LUMINOSITY IN LARGE SPIRAL GALAXIES
Period *Obligations*
09/16/1991-08/31/1995 FY94: \$0 TOTAL: \$289,113
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N A DEVEREUX HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 3022 New Mexico State University - Las Cruces 5848
TRANSPORT COLLABORATION
Period *Obligations*
04/03/1992-10/31/1994 FY94: \$54,000 TOTAL: \$154,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W R WEBBER HQ/W V JONES 13-Physics
HQ/J D BOHLIN

NAGW 3152 New Mexico State University - Las Cruces 5849
STUDIES OF ASTROPHYSICAL PLASMAS IN CLUSTERS OF GALAXIES
Period *Obligations*
07/23/1992-06/30/1995 FY94: \$143,527 TOTAL: \$406,278
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BURNS HQ/G R RIEGLER 11-Astronomy

NAGW 3236 New Mexico State University - Las Cruces 5850
NAGW-3236/NEW MEXICO STATE UNIV/A SUMMER ASTRONOMY WORKSHOP TARGETING TEACHERS OF MINORITY ELEMENTARY
Period *Obligations*
11/02/1992-07/31/1993 FY94: \$0 TOTAL: \$3,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J MCNAMARA HQ/L LAPIANA 11-Astronomy
HQ/G P NEWTON

**NASA'S UNIVERSITY PROGRAM
NEW MEXICO (Continued)**

NAGW 3264 New Mexico State University - Las Cruces 5851
NAGW-3264/NEW MEXICO STATE UNIV LAS CRU/ASTRONOMY WORKSHOPS FOR TEACHES IN SOUTHERN NEW MEXICO
Period Obligations
10/29/1992-01/31/1994 FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
P J BURNS HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAS 5-29800 New Mexico State University - Las Cruces 5852
OPERATION AND MAINT NATL SCIENTIFIC SALLOON FACILITY AND ENGINEERING SUPPORT FOR THE NASA BALLOON PROGRA
Period Obligations
10/01/1987-09/30/1992 FY94: \$27,109 TOTAL: \$66,687,108
Prin. Invest. NASA Tech. Officer CASE Category
J E HALLIGAN GSFC/R S NOCK 39-Env Sci, NEC
GSFC/H C NEEDLEMAN

NAS 5-30105 New Mexico State University - Las Cruces 5853
ENGINEERING SUPPORT SERVICES FOR SHUTTLE SOLAR BACKSCATTER ULTRAVIOLET (SSBUV) EXPERIMENT
Period Obligations
04/24/1987-09/30/1993 FY94: TOTAL: \$334,564
Prin. Invest. NASA Tech. Officer CASE Category
UNAVAILABLE GSFC/D WILLIAMS 41-Aero Engr

NAS 5-30749 New Mexico State University - Las Cruces 5854
SUPPORT SERVICE FOR ULTRAVIOLET IMAGING TELESCOPE
Period Obligations
12/20/1989-12/19/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
F KUELLMER GSFC/A BLUM 11-Astronomy

NAS 5-31125 New Mexico State University - Las Cruces 5855
O/M OF NATIONAL SCIENTIFIC BALLOON FACILITY AND ENGINEERING SUPPORT FOR NASA BALLOON PROGRAM
Period Obligations
09/14/1992-09/30/1997 FY94: \$13,554,871 TOTAL: \$30,125,809
Prin. Invest. NASA Tech. Officer CASE Category
J E HALLIGAN GSFC/R S NOCK 39-Env Sci, NEC
GSFC/H C NEEDLEMAN

NAS 5-31688 New Mexico State University - Las Cruces 5856
SOUNDING ROCKET ENGINEERING SUPPORT
Period Obligations
04/11/1990-04/30/1995 FY94: \$2,326,878 TOTAL: \$10,707,162
Prin. Invest. NASA Tech. Officer CASE Category
K LANE WFF/W W WEST 41-Aero Engr
WFF/W R POWELL

NAS 5-31852 New Mexico State University - Las Cruces 5857
POST-EXPERIMENT SERVICES FOR IMAX BALLOON FLIGHT DATA
Period Obligations
10/06/1992-10/05/1993 FY94: TOTAL: \$27,034
Prin. Invest. NASA Tech. Officer CASE Category
R L GOLDEN GSFC/R E STREITMATTER 11-Astronomy

NCA 2-793 New Mexico State University - Las Cruces 5858
THERMAL STRUCTURE OF NEPTUNE'S ATMOSPHERE
Period Obligations
02/16/1993-11/30/1993 FY94: \$0 TOTAL: \$9,499
Prin. Invest. NASA Tech. Officer CASE Category
M S MARLEY ARC/J B POLLACK 31-Atmos Sci

NCC 2-5048 New Mexico State University - Las Cruces 5859
CONSTRUCTION OF GRAY ATMOSPHERE MODELS FOR URANUS AND NEPTUNE
Period Obligations
04/20/1994-11/30/1994 FY94: \$13,002 TOTAL: \$13,002
Prin. Invest. NASA Tech. Officer CASE Category
M S MARLEY ARC/J B POLLACK 11-Astronomy

NGT 00-040-019 New Mexico State University - Las Cruces 5860
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRA M
Period Obligations
03/12/1990-01/31/1995 FY94: \$440,000 TOTAL: \$1,777,850
Prin. Invest. NASA Tech. Officer CASE Category
S HORAN HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-898 New Mexico State University - Las Cruces 5861
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/20/1992-08/16/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
W P OSBORNE GSFC/G SOFFEN 45-Elec Engr

NGT 00-070-114 New Mexico State University - Las Cruces 5862
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
01/10/1989-12/31/1992 FY94: TOTAL: \$61,745
Prin. Invest. NASA Tech. Officer CASE Category
R B JACQUEZ HQ/F C OWENS 44-Civil Engr

NGT 00-070-288 New Mexico State University - Las Cruces 5863
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
08/18/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R D COLBAUGH JPL/H ASKHENAS 46-Mech Engr

NGT 00-070-341 New Mexico State University - Las Cruces 5864
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
06/30/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
V GHOO HQ/D RUSSELL 79-Soc Sci, NEC

NASA'S UNIVERSITY PROGRAM NEW MEXICO (Continued)

NGT 00-090-114 New Mexico State University - Las Cruces 5865
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/17/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
 P HYNES HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-115 New Mexico State University - Las Cruces 5866
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UNF)
Period Obligations
 09/23/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
 P HYNES HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-161 New Mexico State University - Las Cruces 5867
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 08/26/1993-08/14/1994 FY94: \$12,000 TOTAL: \$72,000
Prin. Invest. NASA Tech. Officer CASE Category
 P HYNES HQ/D K RUSSELL 99-Multi-Discip

NAG 5-2285 University of Albuquerque 5868
 HIGH CONSTRAINT LENGTH VITERBI DECODER
Period Obligations
 06/10/1993-06/30/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 K CAMERON GSFC/W H MILLER 49-Engr, NEC
 GSFC/J C MORAKIS

NAG 3-941 University of New Mexico 5869
 TRANSIENT BEHAVIOR OF HEAT PIPES, INCLUDING START UP FROM A FROZEN STATE W/ APPL TO NASA CONCERNS
Period Obligations
 12/08/1988-12/31/1994 FY94: \$0 TOTAL: \$246,093
Prin. Invest. NASA Tech. Officer CASE Category
 M ELGENK LERC/A J JUHASZ 46-Mech Engr
 LERC/K W BAKER

NAG 3-1346 University of New Mexico 5870
 HYDROGEN COMPATIBILITY STUDIES OF SOLID CORE NUCLE AR THERMAL PROPULSION REACTORS AND SUPPORTING SYS A
Period Obligations
 04/14/1992-11/30/1994 FY94: \$0 TOTAL: \$51,999
Prin. Invest. NASA Tech. Officer CASE Category
 M S EL-GENK LERC/K M PEECOOK 49-Engr, NEC
 D G PEL ACCIO LERC/J R STONE

NAG 5-1828 University of New Mexico 5871
 RELATIONSHIPS BETWEEN SOIL HYDROLOGY/SOIL GEOMORPH IC PROCESSES AND ENVIRONMENTAL CHANGES. . . .
Period Obligations
 12/10/1991-05/31/1994 FY94: \$0 TOTAL: \$73,500
Prin. Invest. NASA Tech. Officer CASE Category
 L D MCFADDEN GSFC/L S WALTER 32-Geological Sci
 E McDONALD

NAG 5-2166 University of New Mexico 5872
 ADVANCED SPACE QUALIFIED LOSSLESS DATA COMPRESSION VLSI
Period Obligations
 12/30/1992-03/31/1994 FY94: \$0 TOTAL: \$130,000
Prin. Invest. NASA Tech. Officer CASE Category
 J VENBRUX GSFC/P YEH 49-Engr, NEC
 GSFC/W H MILLER

NAG 5-2190 University of New Mexico 5873
 HIGH PERFORMANCE LOSSY DATA COMPRESSION SYSTEM
Period Obligations
 01/21/1993-06/30/1995 FY94: \$0 TOTAL: \$99,890
Prin. Invest. NASA Tech. Officer CASE Category
 K CAMERON GSFC/P YEH 49-Engr, NEC
 GSFC/W H MILLER

NAG 5-2191 University of New Mexico 5874
 SPACE QUALIFIED REED SOLOMON ENCODER/DECODER VLSI
Period Obligations
 01/26/1993-12/31/1994 FY94: \$22,000 TOTAL: \$321,580
Prin. Invest. NASA Tech. Officer CASE Category
 S WHITAKER GSFC/W H MILLER 49-Engr, NEC
 G MAKI GSFC/D A DALTON

NAG 5-2204 University of New Mexico 5875
 SEU HARD VLSI ELECTRONICS
Period Obligations
 02/09/1993-02/14/1993 FY94: \$0 TOTAL: \$146,760
Prin. Invest. NASA Tech. Officer CASE Category
 S WHITAKER GSFC/W H MILLER 49-Engr, NEC
 G K MAKI GSFC/J C MORAKIS

NAG 5-2263 University of New Mexico 5876
 RADIATION TESTING AND EVALUATION OF LOSSLESS DATA COMPRESSION
Period Obligations
 05/04/1993-05/14/1994 FY94: \$0 TOTAL: \$154,150
Prin. Invest. NASA Tech. Officer CASE Category
 J VENBRUX GSFC/W H MILLER 49-Engr, NEC
 GSFC/P S YEH

NAG 5-2609 University of New Mexico 5877
 HIGH PERFORMANCE COMMUNICATION VLSI ARCHITECTURES
Period Obligations
 06/13/1994-06/14/1995 FY94: \$455,000 TOTAL: \$455,000
Prin. Invest. NASA Tech. Officer CASE Category
 G K MAKI GSFC/W H MILLER 49-Engr, NEC
 S WHITAKER GSFC/P S YEH
 K CAMERON

NAG 8-894 University of New Mexico 5878
 LUNAR DUST MITIGATION EFFECTS ON TELESCOPE MIRRORS
Period Obligations
 10/23/1991-10/27/1992 FY94: \$0 TOTAL: \$24,334
Prin. Invest. NASA Tech. Officer CASE Category
 K M CHUA MSFC/M E NEIN 11-Astronomy

NAG 8-933 University of New Mexico 5879
 POTENTIAL EFFECTS OF DUST AND TEMPERATURE ON TELESCOPE MIRRORS
Period Obligations
 09/29/1992-10/04/1993 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
 K M CHUA MSFC/M E NEIN 42-Astro Engr
 S W JOHNSON

NAG 8-940 University of New Mexico 5880
 DEFINITION OF THE LUNAR TRANSIT TELESCOPE
Period Obligations
 10/21/1992-04/30/1994 FY94: \$0 TOTAL: \$63,000
Prin. Invest. NASA Tech. Officer CASE Category
 J T MCGRAW MSFC/M E NEIN 42-Astro Engr

**NASA'S UNIVERSITY PROGRAM
NEW MEXICO (Continued)**

NAG 9-160 University of New Mexico 5881
ANALYTICAL ELECTRON MICROSCOPY
Period Obligations
04/01/1986-04/01/1993 FY94: \$0 TOTAL: \$588,000
Prin. Invest. NASA Tech. Officer CASE Category
F J RIETMEIJER JSC/I D BROWNE 32-Geological Sci

NAG 9-401 University of New Mexico 5882
GLYCEROL-INDUCED HYPERHYDRATION
Period Obligations
10/01/1989-01/01/1995 FY94: \$80,000 TOTAL: \$297,052
Prin. Invest. NASA Tech. Officer CASE Category
M L RIEDESEL JSC/S M FORTNEY 56-Medical Sciences

NAG 9-497 University of New Mexico 5883
MICROBEAM STUDIES OF PLANETARY MATERIALS
Period Obligations
03/01/1991-03/01/1993 FY94: \$0 TOTAL: \$319,082
Prin. Invest. NASA Tech. Officer CASE Category
J J PAPIKE JSC/I D BROWNE 19-Phys Sci, NEC

NAGW 1468 University of New Mexico 5884
A STUDY OF BASIC PROBLEMS IN SOLAR AND HELIOSPHERIC PHYSICS
Period Obligations
10/03/1988-01/31/1995 FY94: \$0 TOTAL: \$329,426
Prin. Invest. NASA Tech. Officer CASE Category
H S AHLUWALIA HQ/J D BOHLIN 19-Phys Sci, NEC

NAGW 3293 University of New Mexico 5885
NAGW-3293/UNIV NEW MEXICO/NASA SPACE ENGINEERING RESEARCH CENTER FOR VLSI SYSTEMS DESIGN
Period Obligations
11/27/1992-10/31/1994 FY94: \$1,450,000 TOTAL: \$3,080,000
Prin. Invest. NASA Tech. Officer CASE Category
G MAKI HQ/R J HAYDUK 29-Math/Cmputer, NEC
HQ/P H SMITH

NAGW 3347 University of New Mexico 5886
MICROBEAM STUDIES OF PLANETARY MATERIALS
Period Obligations
01/13/1993-12/14/1994 FY94: \$221,967 TOTAL: \$418,697
Prin. Invest. NASA Tech. Officer CASE Category
J J PAPIKE HQ/H C BRINTON 32-Geological Sci

NAGW 3626 University of New Mexico 5887
LAYER SILICATES AND CARBONACEOUS MATERIALS IN CHON DRITE INTERPLANETARY DUST
Period Obligations
06/02/1993-03/31/1996 FY94: \$78,279 TOTAL: \$160,679
Prin. Invest. NASA Tech. Officer CASE Category
F RIETMEIJER HQ/J BOYCE 32-Geological Sci

NAGW 3646 University of New Mexico 5888
PETROLOGICAL ANALYSIS OF ASTROPHYSICAL DUST ANALOG EVOLUTION
Period Obligations
08/06/1993-02/28/1995 FY94: \$38,388 TOTAL: \$76,776
Prin. Invest. NASA Tech. Officer CASE Category
F J RIETMEIJER HQ/J A NUTH III 19-Phys Sci, NEC

NASW 4683 University of New Mexico 5889
NASW-4683/UNIV NEW MEXICO/OPERATION OF TECHNOLOGY APPLICATION CENTER
Period Obligations
05/01/1992-12/31/1994 FY94: \$503,829 TOTAL: \$945,469
Prin. Invest. NASA Tech. Officer CASE Category
T M BUDGE HQ/A KAHN 39-Env Sci, NEC
S MORAN

NGT 00-070-223 University of New Mexico 5890
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
06/25/1991-07/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J J PAPIKE HQ/F C OWENS 32-Geological Sci

NGT 00-070-329 University of New Mexico 5891
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
07/01/1993-06/30/1996 FY94: \$21,915 TOTAL: \$43,830
Prin. Invest. NASA Tech. Officer CASE Category
J K MCIVER HQ/D K RUSSELL 13-Physics

NGT 00-090-052 University of New Mexico 5892
UNDERGRADUATE RESEARCHER PROGRAM FOR ENGINEERING PHYSICAL SCIENCES AND MATHEMATICS
Period Obligations
08/23/1991-08/31/1994 FY94: \$0 TOTAL: \$307,193
Prin. Invest. NASA Tech. Officer CASE Category
M LEE HQ/B WHITE 49-Engr, NEC

NGT 00-090-221 University of New Mexico 5893
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period Obligations
09/14/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
M LEE HQ/D K RUSSELL 99-Multi-Discip

NGT32-4770 University of New Mexico 5894
THE TRAINING OF 12 STUDENTS IN A PRE-COOPERATIVE EDUCATION PROGRAM
Period Obligations
06/25/1977-05/31/1995 FY94: \$415,818 TOTAL: \$2,279,878
Prin. Invest. NASA Tech. Officer CASE Category
M LEE HQ/O A GUTIERREZ 49-Engr, NEC

NEW YORK

NAG 1-1159 City University of New York City College 5895
COMPUTATION OF UNSTEADY BOUNDARY LAYERS, CALCULATION AND STABILITY OF SUPERSONIC WAKES.
Period Obligations
06/19/1990-05/31/1995 FY94: \$79,988 TOTAL: \$292,569
Prin. Invest. NASA Tech. Officer CASE Category
A ACRIVOS LARC/M G MACARAEG 41-Aero Engr
D PAPAGEORGIOU LARC/A KUMAR

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 1-1346 City University of New York City College 5896
TETRAVALENT CHROMIUM (CR4+) AS A LASER-ACTIVE ION FOR
TUNABLE SOLID-STATE LASERS

Period	Obligations	
09/24/1991-09/17/1993	FY94: \$0	TOTAL: \$38,280
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R R ALFANO	LARC/N P BARNES	13-Physics
	LARC/L R MCMASTER	

NAG 1-1590 City University of New York City College 5897
STUDIES OF SHOCK WAVE INTERACTIONS WITH HOMOGENEOUS
AND ISOTROPIC TURBULENCE

Period	Obligations	
03/01/1994-02/28/1995	FY94: \$50,000	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C WATKINS	LARC/D M BUSHNELL	41-Aero Engr
Y ANDREPOULOS		

NAG 3-1167 City University of New York City College 5898
MOLECULAR DYNAMICS OF A FLUID-SOLID SYSTEM

Period	Obligations	
05/07/1990-12/31/1994	FY94: \$125,000	TOTAL: \$550,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J KOPLIK	LERC/R W VERNON	13-Physics
J R BANEVAR		

NAG 3-1490 City University of New York City College 5899
INVESTIGATION OF THE BASIC PHYSICS OF HIGH EFFICIENT
SEMICONDUCTOR HOT CARRIER SOLAR CELLS

Period	Obligations	
04/21/1993-05/30/1995	FY94: \$148,072	TOTAL: \$303,292
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R R ALFANO	LERC/B S GOOD	45-Elec Engr
	LERC/L WEINBERG	

NAG 3-1618 City University of New York City College 5900
CONTROLLING THE MOBILITY OF A FLUID PARTICLE IN SPACE
BY USING REMOBLIZING SURFACTANTS

Period	Obligations	
06/16/1994-06/16/1995	FY94: \$50,000	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C MALDARELLI	LERC/M M WEISLOGEL	19-Phys Sci, NEC
D PAPAGEORGIOU	LERC/R THOMPSON	

NAG 8-261 City University of New York City College 5901
JOVE

Period	Obligations	
12/08/1992-05/31/1995	FY94: \$19,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G G GOSS	MSFC/F SIX	99-Multi-Discip

NAGW 690 City University of New York City College 5902
REMOTE SENSING RESEARCH ON RADAR

Period	Obligations	
12/01/1984-01/31/1995	FY94: \$100,000	TOTAL: \$1,213,979
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W J PIERSON	HQ/G S LAGERLOEF	33-Oceanography
	HQ/W S WILSON	

NAGW 1704 City University of New York City College 5903
DEVELOPMENT MATURATION AND PHYSIOLOGY OF THE
BRAIN-PITUITARY

Period	Obligations	
03/03/1989-01/31/1995	FY94: \$50,000	TOTAL: \$299,996
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M P SCHREIBMAN	HQ/T W HALSTEAD	51-Biological Sci

NAGW 3860 City University of New York City College 5904
POSTURE LOAD INDUCED BONE MAINTENANCE

Period	Obligations	
01/26/1994-12/31/1994	FY94: \$80,000	TOTAL: \$80,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S COWIN	HQ/F M SULZMAN	46-Mech Engr

NAGW 4098 City University of New York City College 5905
TUNABLE SOLID STATE LASERS AND OPTICAL IMAGING

Period	Obligations	
08/02/1994-08/31/1997	FY94: \$399,492	TOTAL: \$399,492
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R ALFANO	HQ/B L WHITE	13-Physics

NAGW 4118 City University of New York City College 5906
ELECTRON COLLISIONS WITH FREE RADICALS

Period	Obligations	
08/17/1994-06/30/1997	FY94: \$40,000	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K BECKER	HQ/J BERGARAN	31-Atmos Sci

NCA 2-695 City University of New York City College 5907
EARLY EVOLUTION OF PLANET-FORMING DISKS

Period	Obligations	
03/20/1992-03/31/1994	FY94: \$0	TOTAL: \$22,414
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C YUAN	ARC/P CASSEN	11-Astronomy

NCC 5-74 City University of New York City College 5908
COOPERATIVE RESEARCH AND EDUCATION

Period	Obligations	
06/28/1994-06/30/1995	FY94: \$241,559	TOTAL: \$241,559
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L P JONES	GSFC/D TRAVIS	39-Env Sci, NEC
J W FROST		

NGT 00-090-056 City University of New York City College 5909
UNDERGRADUATE STUDENT RESEARCHERS PRG

Period	Obligations	
10/28/1991-08/31/1995	FY94: \$24,000	TOTAL: \$51,925
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C WATKINS	HQ/B WHITE	99-Multi-Discip
A BROWN		
C MORNING		

NGT 00-090-235 City University of New York City College 5910
UNDERGRADUATE STUDENT RESEARCH PROGRAM

Period	Obligations	
12/09/1993-08/14/1994	FY94: \$12,000	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C B WATKINS	HQ/D K RUSSELL	49-Engr, NEC

NAG 5-2291 City University of New York - Staten Island 5911
AN AI SYSTEM TO AID IN SUBMITTING SOFTWARE TO THE
SOFTWARE UNION CATALOGUE

Period	Obligations	
07/22/1993-08/14/1994	FY94: \$0	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M TAUSNER	GSFC/B JACOBS	22-Computer Science

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 1-1481 Clarkson University 5912
THEORETICAL AND EXPERIMENTAL STUDIES IN AEROSPACE SCIENCES NLPN 92-1002
Period Obligations
01/28/1993-01/27/1995 FY94: \$40,001 TOTAL: \$84,001
Pnn. Invest. NASA Tech. Officer CASE Category
M N LARC/S O KJELGAARD 41-Aero Engr
G AHMADI
G LEE-GLAUSER

NAG 2-724 Clarkson University 5913
INSTRUMENTATION DEVELOPMENT FOR MULTIPOINT MEASUREMENTS
Period Obligations
07/24/1991-08/08/1995 FY94: \$100,000 TOTAL: \$254,369
Pnn. Invest. NASA Tech. Officer CASE Category
M N GLAUSER ARC/E M HAMLIN 41-Aero Engr
ARC/R G BOGUE

NAG 3-1089 Clarkson University 5914
3-D SHAPE OPT UTIL THE BOUNDARY ELEMENT METH
Period Obligations
10/25/1989-11/30/1993 FY94: \$0 TOTAL: \$184,815
Pnn. Invest. NASA Tech. Officer CASE Category
J H KANE LERC/D A HOPKINS 49-Engr, NEC

NAG 3-1101 Clarkson University 5915
PROGRESSIVE DAMAGE AND FRACTURE IN COMPOSITES UNDER DYNAMIC LOADING
Period Obligations
12/05/1989-12/31/1994 FY94: \$0 TOTAL: \$172,442
Pnn. Invest. NASA Tech. Officer CASE Category
L MINNETYAN LERC/P L MURTHY 49-Engr, NEC

NAG 3-1122 Clarkson University 5916
THERMOCAPILLARY MIGRATION AND INTERACTIONS OF BUBBLE AND DROPS
Period Obligations
01/10/1990-12/31/1994 FY94: \$225,000 TOTAL: \$860,490
Pnn. Invest. NASA Tech. Officer CASE Category
R S SUBRAMANIAN LERC/M E HILL 19-Phys Sci, NEC

NAG 3-1470 Clarkson University 5917
INTERACTIONS OF BUBBLES AND DROPS IN A TEMPERATURE GRADIENT
Period Obligations
03/04/1993-03/01/1995 FY94: \$50,000 TOTAL: \$100,000
Pnn. Invest. NASA Tech. Officer CASE Category
R S SUBRAMANIAN LERC/R L THOMPSON 43-Chem Engr

NAG 5-1809 Clarkson University 5918
RAPID THERMAL PROCESSING OF SEMICONDUCTORS IN SPACE
Period Obligations
09/19/1991-11/30/1994 FY94: \$70,000 TOTAL: \$198,944
Pnn. Invest. NASA Tech. Officer CASE Category
W R WILCOX GSFC/L R PURVES 47-Materials Engr

NAG 5-2471 Clarkson University 5919
EXPERIMENTAL AND ANALYTICAL STUDIES OF CAPILLARY-PUMPED LOOP HEAT PIPES
Period Obligations
12/22/1993-01/14/1995 FY94: \$73,872 TOTAL: \$73,872
Pnn. Invest. NASA Tech. Officer CASE Category
N T OBOT GSFC/J KU 49-Engr, NEC

NAG 8-753 Clarkson University 5920
INFLUENCE OF CONVECTION ON MICROSTRUCTURES
Period Obligations
08/15/1988-08/16/1994 FY94: \$0 TOTAL: \$339,627
Pnn. Invest. NASA Tech. Officer CASE Category
W R WILCOX MSFC/F R SZOFRAN 13-Physics
MSFC/S D COBB

NAG 8-831 Clarkson University 5921
MODELING DIRECTIONAL SOLIDIFICATION
Period Obligations
05/10/1990-05/20/1994 FY94: \$0 TOTAL: \$315,000
Pnn. Invest. NASA Tech. Officer CASE Category
W R WILCOX MSFC/F R SZOFRAN 19-Phys Sci, NEC
MSFC/G PERRY

NAG 8-1063 Clarkson University 5922
MODELING OF DETACHED SOLIDIFICATION
Period Obligations
06/23/1994-06/22/1995 FY94: \$55,000 TOTAL: \$55,000
Pnn. Invest. NASA Tech. Officer CASE Category
L L REGEL MSFC/J P DOWNEY 47-Materials Engr
W R WILCOX

NAGW 976 Clarkson University 5923
THREE (3) MONTHS NCE UNDER ELIMINATION CLAUSE
Period Obligations
09/01/1986-04/30/1995 FY94: \$325,000 TOTAL: \$8,360,123
Pnn. Invest. NASA Tech. Officer CASE Category
W R WILCOX HQ/W ORAN 51-Biological Sci
B HOEKSTRA HQ/R P WHITTEN

NAGW 3471 Clarkson University 5924
FIRST INTERNATIONAL WORKSHOP ON G-JITTER
Period Obligations
04/14/1993-02/28/1995 FY94: \$0 TOTAL: \$20,000
Pnn. Invest. NASA Tech. Officer CASE Category
L L REGAL HQ/G L MARTIN 13-Physics

NGT 00-050-825 Clarkson University 5925
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
G AHMADI HQ/F C OWENS 41-Aero Engr

NGT 00-050-839 Clarkson University 5926
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/16/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
M GLAUSER HQ/F C OWENS 46-Mech Engr

NGT 00-051-130 Clarkson University 5927
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/02/1993-09/19/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
G AHMADI MSFC/B SWINFORD 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NGT 00-051-142 **Clarkson University** **5928**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/19/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
S P LIN HQ/R WHITE 46-Mech Engr

NAG 5-1598 **Columbia University** **5936**
WZ SAGITTAE: A PULSATING 'LITTLE DIPPER' SOURCE
Period *Obligations*
05/09/1991-05/31/1993 FY94: \$0 TOTAL: \$63,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J PATTERSON GSFC/R PETRE 11-Astronomy

NGT 00-051-314 **Clarkson University** **5929**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/08/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
G AHMADI ARC/M MOORE 41-Aero Engr

NAG 5-1912 **Columbia University** **5937**
A DEEP LUMINOSITY-LIMITED SAMPLE OF THE X-RAY POPULATIONS
IN M31
Period *Obligations*
02/24/1992-02/28/1994 FY94: \$0 TOTAL: \$70,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D J HELEAND GSFC/R PETRE 11-Astronomy

NGT 00-051-345 **Clarkson University** **5930**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/28/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D K AIDUN HQ/G A LESANE 49-Engr, NEC

NAG 5-1935 **Columbia University** **5938**
SEYFERT 1.8 AND 1.9 GLAXIES (509)
Period *Obligations*
04/07/1992-10/31/1994 FY94: \$35,000 TOTAL: \$120,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J P HALPERN GSFC/R PETRE 11-Astronomy

NGT 00-051-354 **Clarkson University** **5931**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
F M CARLSON HQ/G A LESANE 46-Mech Engr

NAG 5-1948 **Columbia University** **5939**
DEFORMATION IN ALASKA: (1) ANAL. OF GPS REOCCUPATION
OF ALASKAN VLBI SITES (2) SUBDUCTION, . . .
Period *Obligations*
03/18/1992-03/31/1995 FY94: \$63,000 TOTAL: \$158,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J BEAVAN GSFC/B G BILLS 32-Geological Sci

NGT 00-051-362 **Clarkson University** **5932**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/08/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
F M CARLSON HQ/G A LESANE 46-Mech Engr

NAG 5-1949 **Columbia University** **5940**
KINEMATICS OF THE NEW ZEALAND PLATE BOUNDARY: RELATIVE
MOTION BY GPS ACROSS NETWORKS
Period *Obligations*
03/18/1992-05/31/1995 FY94: \$39,615 TOTAL: \$107,115
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J BEAVAN GSFC/B G BILLS 32-Geological Sci

NAG 1-649 **Columbia University** **5933**
NONLINEAR LARGE ANGLE MANEUVERS OF FLEXIBLE SPACE
STRUCTURES
Period *Obligations*
03/04/1986-10/31/1994 FY94: \$75,000 TOTAL: \$704,664
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R W LONGMAN LARC/J N JUANG 42-Astro Engr
LARC/W K BELVIN

NAG 5-1958 **Columbia University** **5941**
ECLIPSING CATAclysmic VARIABLES
Period *Obligations*
03/30/1992-10/14/1995 FY94: \$16,000 TOTAL: \$86,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J O PATTERSON GSFC/R PETRE 11-Astronomy

NAG 5-618 **Columbia University** **5934**
X-RAY ASTRONOMY
Period *Obligations*
02/01/1983-01/14/1995 FY94: \$445,000 TOTAL: \$7,830,857
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R NOVICK GSFC/L J EARLY 13-Physics
W H-M KU GSFC/R H PLESS
M VARTANIAN

NAG 5-1960 **Columbia University** **5942**
FOUR-DIMENSIONAL OCEANIC AND ATMOSPHERIC DATA ASSI
MILATION WITH THE TRMM DATA
Period *Obligations*
04/03/1992-04/14/1995 FY94: \$125,000 TOTAL: \$295,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
K TAKANO GSFC/O W THIELE 31-Atmos Sci

NAG 5-642 **Columbia University** **5935**
HIGH EMISSION LINE SPECTROSCOPY
Period *Obligations*
04/01/1987-10/31/1994 FY94: \$238,000 TOTAL: \$2,174,952
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
C MARTIN GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-2016 **Columbia University** **5943**
RED-SHIFTED ELECTRON-POSITRON ANNIHILATION GAMMA-RAYS
FROM RADIOPULSARS
Period *Obligations*
07/15/1992-07/14/1995 FY94: \$40,000 TOTAL: \$87,500
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M A RUDERMAN GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 5-2017 Columbia University 5944
BLACK HOLE MODELS FOR GAMMA-RAY BURSTS
Period Obligations
07/15/1992-07/14/1994 FY94: \$0 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
J SHAHAM GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2051 Columbia University 5945
MULTIWAVELENGTH OBSERVATIONS OF UNIDENTIFIED HIGH-ENERGY GAMMA-RAY SOURCES
Period Obligations
07/28/1992-02/14/1995 FY94: \$54,000 TOTAL: \$129,000
Prin. Invest. NASA Tech. Officer CASE Category
J P HALPERN GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2058 Columbia University 5946
IES SUPPLEMENT TO OPEN-OCEAN VALIDATION OF TOPEX/P OSEIDON SEA LEVEL
Period Obligations
08/05/1992-08/14/1994 FY94: \$0 TOTAL: \$124,861
Prin. Invest. NASA Tech. Officer CASE Category
E J KATZ GSFC/A J BUSALACCHI 33-Oceanography

NAG 5-2079 Columbia University 5947
DUST CONTENT OF A HYDROGEN RICH, LOW SURFACE BRIGHTNESS GALAXY AND THE LUMINOSITY HISTORY OF 3C273
Period Obligations
08/25/1992-08/31/1994 FY94: \$0 TOTAL: \$23,050
Prin. Invest. NASA Tech. Officer CASE Category
T T HAMILTON GSFC/R PETRE 11-Astronomy

NAG 5-2092 Columbia University 5948
WAS 49: MIRROR FOR A HIDDEN SEYFERT 1 GALAXY
Period Obligations
09/16/1992-09/14/1993 FY94: \$0 TOTAL: \$6,000
Prin. Invest. NASA Tech. Officer CASE Category
J P HALPERN GSFC/D WEST 11-Astronomy

NAG 5-2235 Columbia University 5949
GAMMA-RAY EMISSION FROM GLOBULAR CLUSTERS
Period Obligations
04/08/1993-05/14/1995 FY94: \$14,443 TOTAL: \$44,593
Prin. Invest. NASA Tech. Officer CASE Category
P KAARET GSFC/J NORRIS 11-Astronomy

NAG 5-2272 Columbia University 5950
PARTICIPATION AS AN INTERNATIONAL ADVISOR IN THE A STRO-D PROGRAM
Period Obligations
05/21/1993-07/31/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
D HELFAND GSFC/N WHITE 11-Astronomy

NAG 5-2309 Columbia University 5951
ARCHAEOLOGY OF THE LOCAL BUBBLE: A SERENDIPITOUS SPECTROSCOPIC SURVEY OF THE EUV DIFFUSE
Period Obligations
07/01/1993-07/14/1995 FY94: \$53,650 TOTAL: \$153,950
Prin. Invest. NASA Tech. Officer CASE Category
D C MARTIN GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2414 Columbia University 5952
THE MANY FACES OF AE AQUARI
Period Obligations
11/06/1993-11/14/1994 FY94: \$28,500 TOTAL: \$28,500
Prin. Invest. NASA Tech. Officer CASE Category
J O PATTERSON GSFC/D WEST 11-Astronomy

NAG 5-2524 Columbia University 5953
WARM ABSORBERS: THE MOMENT OF TRUTH AND THE GEMINGA PULSAR
Period Obligations
02/24/1994-03/14/1995 FY94: \$37,011 TOTAL: \$37,011
Prin. Invest. NASA Tech. Officer CASE Category
J P HALPERN GSFC/N WHITE 11-Astronomy

NAG 5-2556 Columbia University 5954
NEW STARBURST GALAXIES WITH EXTREME X-RAY LUMINOSITIES AND THROUGH THE GAS DARKLY: AN UNOBSERVED....
Period Obligations
03/10/1994-03/31/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. NASA Tech. Officer CASE Category
D J HELFAND GSFC/N WHITE 11-Astronomy

NAG 5-2569 Columbia University 5955
DISTANCE TO THE GEMINGA PULSAR
Period Obligations
04/12/1994-04/14/1995 FY94: \$86,658 TOTAL: \$86,658
Prin. Invest. NASA Tech. Officer CASE Category
J P HALPERN GSFC/R OLIVERSEN 11-Astronomy

NAG 9-329 Columbia University 5956
EARLY DIFFERENTIATION OF THE MOON
Period Obligations
03/01/1989-09/01/1994 FY94: \$0 TOTAL: \$471,410
Prin. Invest. NASA Tech. Officer CASE Category
J LONGHI JSC/I D BROWNE 19-Phys Sci, NEC

NAG 9-529 Columbia University 5957
SPACE RADIATION EFFECTS ON NEURITOGENESIS
Period Obligations
05/22/1991-07/01/1995 FY94: \$29,400 TOTAL: \$325,670
Prin. Invest. NASA Tech. Officer CASE Category
B V WORGUL JSC/D MORRISON 56-Medical Sciences
R J SOHN

NAGW 895 Columbia University 5958
INFLUENCE OF CLIMATE CHANGE ON DEEP SEA VENTILATION
Period Obligations
05/15/1986-11/14/1994 FY94: \$140,000 TOTAL: \$1,200,031
Prin. Invest. NASA Tech. Officer CASE Category
W S BROECKER HQ/M J KURYLO 31-Atmos Sci
B HAMELIN HQ/R T WATSON

NAGW 916 Columbia University 5959
MODELING STUDIES
Period Obligations
07/01/1986-10/31/1994 FY94: \$103,000 TOTAL: \$929,527
Prin. Invest. NASA Tech. Officer CASE Category
M A CANE HQ/G S LAGERLOEF 33-Oceanography
HQ/W S WILSON

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAGW 1344 Columbia University 5960
ANTARCTIC OCEAN POLYNIES
Period *Obligations*
06/29/1988-02/28/1993 FY94: \$0 TOTAL: \$241,478
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S S JACOBS HQ/R H THOMAS 33-Oceanography
A L GORDON HQ/W S WILSON

NAGW 1579 Columbia University 5961
EFFECTS OF SIMULATED MICROGRAVITY AND HYPERGRAVITY ON
Period *Obligations*
02/01/1989-10/31/1994 FY94: \$97,543 TOTAL: \$372,919
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J WOLGEMUTH HQ/T HALSTEAD 59-Life Sci, NEC

NAGW 1618 Columbia University 5962
PHYSICS OF SYSTEMS CONTAINING NEUTRON STARS
Period *Obligations*
01/18/1989-12/31/1994 FY94: \$65,000 TOTAL: \$398,575
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J SHAHAM HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 1752 Columbia University 5963
COSMONAUT POLYNIA: CHARACTERISTICS, DYNAMICS,
THERMODYN.
Period *Obligations*
05/01/1989-01/31/1993 FY94: \$0 TOTAL: \$190,140
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L GORDON HQ/R H THOMAS 33-Oceanography
HQ/W S WILSON

NAGW 1844 Columbia University 5964
EXPLORING THE SOUTHERN OCEAN RESPONSE TO CLIMATE C
HANGE
Period *Obligations*
01/09/1990-11/30/1992 FY94: \$0 TOTAL: \$315,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D G MARTINSON HQ/R H THOMAS 33-Oceanography
D RIND HQ/W S WILSON

NAGW 1887 Columbia University 5965
PRE-PHASE A DEVELOPMENT OF A FAR ULTRAVIOLET
PHOTOMETRIC
Period *Obligations*
12/14/1989-10/31/1992 FY94: \$0 TOTAL: \$224,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MARTIN HQ/G C CLAYTON 19-Phys Sci, NEC

NAGW 1925 Columbia University 5966
CIRCULATION STUDIES USING GEOSAT ALTIMETER AND SHI P
DERIVED DATA
Period *Obligations*
05/05/1990-09/30/1993 FY94: \$0 TOTAL: \$303,257
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L GORDON HQ/G S LAGERLOEF 32-Geological Sci
HQ/W S WILSON

NAGW 2013 Columbia University 5967
DEVELOPMENT OF A HIGH RESOLUTION LIQUID XENON IMAG ING
TELESCOPE FOR MEDIUM ENERGY GAMMA-RAY ASTROPH
Period *Obligations*
02/27/1990-12/31/1994 FY94: \$250,000 TOTAL: \$1,156,840
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E APRILE HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 2111 Columbia University 5968
NAGW-2111/COLUMBIA UNIV/CARBON AND HYDROGEN ISOTOPE
COMPOSITION AND C CONCENTRATION IN METHANE
Period *Obligations*
12/03/1990-06/30/1993 FY94: \$0 TOTAL: \$32,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W S BROECKER HQ/M J KURYLO 31-Atmos Sci
HQ/R T WATSON

NAGW 2189 Columbia University 5969
NAGW-2189/COLUMBIA UNIV/INVESTIGATIONS OF GLOBAL SHORT
WAVE AND PHOTOSYNTHETICALLY ACTIVE SURFACE
Period *Obligations*
07/25/1990-12/31/1993 FY94: \$0 TOTAL: \$317,343
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J K BISHOP HQ/M R LEWIS 33-Oceanography
R N SAMBROTTO HQ/W S WILSON

NAGW 2479 Columbia University 5970
AGES AND ABUNDANCES OF BULGE POPULATIONS
Period *Obligations*
05/07/1991-04/30/1995 FY94: \$67,000 TOTAL: \$259,100
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R M RICH HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2507 Columbia University 5971
THE ORIGIN OF THE COSMIC X-RAY BACKGROUND
Period *Obligations*
06/17/1991-04/30/1995 FY94: \$190,000 TOTAL: \$670,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J HELFAND HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2565 Columbia University 5972
ACCRETION PROCESSES IN CATAclysmic BINARIES
Period *Obligations*
08/06/1991-04/30/1995 FY94: \$132,704 TOTAL: \$477,603
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J O PATTERSON HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2566 Columbia University 5973
X-RAY EMISSION AS A PROBE OF GALAXY EVOLUTION
Period *Obligations*
08/01/1991-04/30/1994 FY94: \$0 TOTAL: \$265,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T T HAMILTON HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2593 Columbia University 5974
LARGE-FORMAT, HIGH RESOLUTION MICROCHANNEL PLATE D
ETECTORS FOR ULTRAVIOLET ASTRONOMY
Period *Obligations*
08/02/1991-08/31/1994 FY94: \$0 TOTAL: \$270,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MARTIN HQ/R STACHNIK 99-Multi-Discip

NAGW 2599 Columbia University 5975
NAGW-2599/COLUMBIA UNIV/ERS-1 SAR INVESTIGATION OF ICE
KINEMATICS AND SURFACE WIND FIELDS IN THE WEDDE
Period *Obligations*
08/07/1991-10/31/1994 FY94: \$0 TOTAL: \$184,248
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L MARTINSON HQ/R H THOMAS 33-Oceanography

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAGW 2668	Columbia University	5976
NAGW-2668/COLUMBIA UNIV/A PRECALCULUS/CALCULUS MOD EL PROJECT TO INCREASE THE POOL OF AFRICAN HISPAN		
<i>Period</i>	<i>Obligations</i>	
09/17/1991-06/30/1995	FY94: \$163,800	TOTAL: \$415,300
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G LOPEZ	JPL/Y FREEMAN	29-Math/Cmputer, NEC
	HQ/B L WHITE	
NAGW 2721	Columbia University	5977
DEVELOPMENT OF MICROCHANNEL PLATE X-RAY OPTICS		
<i>Period</i>	<i>Obligations</i>	
09/16/1991-06/30/1993	FY94: \$23,485	TOTAL: \$54,041
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P KAARET	HQ/L KALUZIENSKI	13-Physics
NAGW 3010	Columbia University	5978
NUMERICAL SIMULATIONS OF PLASMA TURBULENCE IN THE EQUATORIAL ELECTROJET		
<i>Period</i>	<i>Obligations</i>	
03/20/1992-04/30/1994	FY94: \$0	TOTAL: \$130,064
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G A NAVRATIL	HQ/M MELLOTT	13-Physics
	HQ/J D BOHLIN	
NAGW 3075	Columbia University	5979
A THEORETICAL ANALYSIS OF THERMAL RADIATION FROM N EUTRON STARS		
<i>Period</i>	<i>Obligations</i>	
05/15/1992-03/31/1995	FY94: \$60,000	TOTAL: \$180,000
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J APPEGATE	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	
NAGW 3362	Columbia University	5980
SEA ICE ON THE SOUTHERN OCEAN		
<i>Period</i>	<i>Obligations</i>	
01/29/1993-02/28/1995	FY94: \$120,614	TOTAL: \$232,903
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S S JACOBS	HQ/R H THOMAS	33-Oceanography
	HQ/R A SCHIFFER	
NAGW 3407	Columbia University	5981
EXPERIMENTAL AND MODELING STUDIES OF MASSIF ANORTH OSITES		
<i>Period</i>	<i>Obligations</i>	
03/01/1993-02/28/1995	FY94: \$28,658	TOTAL: \$58,824
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J LONGHI	HQ/H C BRINTON	32-Geological Sci
NAGW 3434	Columbia University	5982
EARLY DIFFERENTIATION OF THE MOON: EXPERIMENTAL AN D MODELING STUDIES		
<i>Period</i>	<i>Obligations</i>	
03/05/1993-02/28/1995	FY94: \$107,436	TOTAL: \$224,758
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J LONGHI	HQ/H C BRINTON	32-Geological Sci
NAGW 3539	Columbia University	5983
DIRECT OBSERVATION OF WAVE INDUCED CHAOS		
<i>Period</i>	<i>Obligations</i>	
04/27/1993-01/31/1996	FY94: \$77,146	TOTAL: \$150,341
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M E MAUEL	HQ/E C WHIPPLE	13-Physics
	HQ/J D BOHLIN	
NAGW 3945	Columbia University	5984
FABREY-PEROT SPECTROSCOPY IN THE FAR ULTRAVIOLET		
<i>Period</i>	<i>Obligations</i>	
04/25/1994-01/31/1995	FY94: \$39,021	TOTAL: \$39,021
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C MARTIN	HQ/R V STACHNIK	11-Astronomy
	HQ/E J WEILER	
NAS 5-32063	Columbia University	5985
STUDY - 'A COMPLETE PUBLIC ARCHIVE FOR THE EINSTEIN IPC'		
<i>Period</i>	<i>Obligations</i>	
09/24/1992-09/23/1995	FY94: \$45,000	TOTAL: \$185,600
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D HELFOND	GSFC/R OLIVERSEN	11-Astronomy
NCC 5-29	Columbia University	5986
ATMOSPHERIC, CLIMATIC AND ENVIRONMENTAL RESEARCH		
<i>Period</i>	<i>Obligations</i>	
10/01/1983-12/31/1994	FY94: \$76,484	TOTAL: \$5,617,199
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W S BROECKER	GSFC/L D TRAVIS	31-Atmos Sci
V M GORNITZ		
NCC 5-34	Columbia University	5987
MODELING OF OCEAN CIRCULATION AND ATMOSPHERIC CHEMICAL SYSTEMS		
<i>Period</i>	<i>Obligations</i>	
11/15/1985-11/30/1994	FY94: \$1,545,679	TOTAL: \$2,906,233
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C K CHU	GSFC/R STOTHERS	31-Atmos Sci
NCC 5-36	Columbia University	5988
GLOBAL HABITABILITY STUDIES		
<i>Period</i>	<i>Obligations</i>	
01/13/1986-10/31/1993	FY94: \$0	TOTAL: \$5,221,607
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R L LEVENSON	GSFC/L TRAVIS	31-Atmos Sci
NCC 5-37	Columbia University	5989
RESEARCH IN ASTROPHYSICAL PROCESSES		
<i>Period</i>	<i>Obligations</i>	
07/01/1986-06/30/1993	FY94: \$0	TOTAL: \$449,046
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M A RUDERMAN	GSFC/B CARLSON	11-Astronomy
NCC 5-44	Columbia University	5990
MODELLING OF ATMOSPHERIC CIRCULATION AND CHEMISTRY		
<i>Period</i>	<i>Obligations</i>	
09/13/1991-10/14/1994	FY94: \$738,600	TOTAL: \$1,780,986
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L POLVANI	GSFC/D PETEET	31-Atmos Sci
NCC 5-45	Columbia University	5991
A NEW APPROACH TO THE STUDY OF THE TURBULENT LAYER		
<i>Period</i>	<i>Obligations</i>	
09/17/1991-09/30/1993	FY94: \$0	TOTAL: \$111,530
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A LEVENSON	GSFC/V CANUTO	31-Atmos Sci
NCC 5-61	Columbia University	5992
INTERDISCIPLINARY CLIMATE APPLICATIONS STUDIES		
<i>Period</i>	<i>Obligations</i>	
03/14/1994-03/31/1995	FY94: \$491,886	TOTAL: \$491,886
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C E ROSENWEIG	GSFC/L D TRAVIS	39-Env Sci, NEC

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NCC 5-72 Columbia University 5993
RAPID PALEOCLIMATIC CHANGE
Period *Obligations*
06/28/1994-06/30/1995 FY94: \$26,545 TOTAL: \$26,545
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J KUKLA GSFC/B A CARLSON 32-Geological Sci

NGT 00-030-217 Columbia University 6001
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/23/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L GORDON HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-030-081 Columbia University 5994
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/11/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K G HARRISON HQ/D M BUTLER 39-Env Sci, NEC
W BROECKER HQ/G S WILSON

NGT 00-050-583 Columbia University 6002
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
10/02/1990-12/02/1992 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G E KAISER HQ/F C OWENS 22-Computer Science

NGT 00-030-162 Columbia University 5995
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/24/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G FAIRBANKS HQ/G ASRAR 99-Multi-Discip
HQ/D M BUTLER

NGT 00-050-777 Columbia University 6003
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/10/1991-06/30/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MARTIN HQ/F C OWENS 11-Astronomy

NGT 00-030-166 Columbia University 5996
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/23/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R BELL HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-050-792 Columbia University 6004
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/28/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MARTIN HQ/F C OWENS 13-Physics

NGT 00-030-171 Columbia University 5997
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/23/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W S BROECKER HQ/G ASRAR 32-Geological Sci
HQ/D M BUTLER

NGT 00-051-038 Columbia University 6005
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/06/1993-05/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P KAARET JPL/C HIX 13-Physics

NGT 00-030-177 Columbia University 5998
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/23/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M PETEET HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-090-229 Columbia University 6006
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
10/01/1993-08/14/1994 FY94: \$12,000 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K MCDERMOTT HQ/D K RUSSELL 99-Multi-Discip

NGT 00-030-185 Columbia University 5999
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/23/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G FAIRBANKS HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NCC 2-5101 Cooper Union 6007
SIGNAL ANALYSIS OF PARTIALLY POLARIZED LIGHT REFLECTED BY PLANT CANOPIES
Period *Obligations*
09/16/1994-09/30/1996 FY94: \$25,000 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F L FONTAINE ARC/V C VANDERBILT 39-Env Sci, NEC

NGT 00-030-186 Columbia University 6000
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/23/1993-08/31/1996 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G BOND HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-010-009 Cooper Union 6008
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP PROGRAM
Period *Obligations*
10/20/1993-03/31/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LE MEE HQ/G S SEIDEL 41-Aero Engr
HQ/J R FACEY

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 1-1184 Cornell University 6009
CRACK GROWTH PREDICTION METHODOLOGY FOR MULTI-SITE
DAMAGE D
Period Obligations
09/27/1990-09/30/1994 FY94: \$119,666 TOTAL: \$519,334
Prin. Invest. NASA Tech. Officer CASE Category
A R INGRAFFEA LARC/J C NEWMAN 46-Mech Engr
D V SWENSON LARC/C E HARRIS

NAG 2-665 Cornell University 6017
MULTIGRID METHODS FOR AERODYNAMIC PROBLEMS IN COM PLEX
GEOMETRIES
Period Obligations
08/16/1990-05/31/1993 FY94: \$0 TOTAL: \$259,322
Prin. Invest. NASA Tech. Officer CASE Category
D A CAUGHEY ARC/W J CHYU 41-Aero Engr
ARC/D P BENCZE

NAG 1-1311 Cornell University 6010
MODE I/II FATIGUE CRACK GROWTH MEASUREMENTS IN 2024
ALUMINUM SHEET - FDP
Period Obligations
08/08/1991-09/30/1994 FY94: \$70,000 TOTAL: \$239,837
Prin. Invest. NASA Tech. Officer CASE Category
A R INGRAFFEA LARC/J C NEWMAN 46-Mech Engr
A J ZEHNDER LARC/C E HARRIS

NAG 2-697 Cornell University 6018
INTERSTELLAR SCATTERING IMPLICATIONS FOR SETI DET ECTION
STRATEGIES
Period Obligations
03/15/1991-05/31/1994 FY94: \$13,000 TOTAL: \$156,463
Prin. Invest. NASA Tech. Officer CASE Category
J M CORDES ARC/D H BROCKER 11-Astronomy

NAG 1-1396 Cornell University 6011
TILT ROTOR BLADE VORTEX INTERACTION NOISE - FDP
Period Obligations
01/31/1992-12/31/1994 FY94: \$65,001 TOTAL: \$158,997
Prin. Invest. NASA Tech. Officer CASE Category
A R GEORGE LARC/D R HOAD 41-Aero Engr
LARC/D A CONNER

NAG 2-742 Cornell University 6019
EFFECTS OF AGRICULTURAL DEVELOPMENT ON TRACE GAS
FLUXES IN THE BRAZILIAN CERRADO
Period Obligations
11/27/1991-05/31/1995 FY94: \$0 TOTAL: \$143,180
Prin. Invest. NASA Tech. Officer CASE Category
J M DUXBURY ARC/J MAZZURCO 55-Agriculture Sci

NAG 1-1542 Cornell University 6012
PDF METHODS FOR COMBUSTION IN HIGH-SPEED TURBULENT
FLOWS
Period Obligations
08/27/1993-08/24/1995 FY94: \$20,001 TOTAL: \$70,001
Prin. Invest. NASA Tech. Officer CASE Category
S B POPE LARC/J P DRUMMOND 41-Aero Engr

NAG 2-800 Cornell University 6020
KWIC: A WIDEFIELD MID-INFRARED ARRAY CAMERA/SPECT
ROMETER FOR THE KAO
Period Obligations
08/27/1992-10/31/1994 FY94: \$21,430 TOTAL: \$376,130
Prin. Invest. NASA Tech. Officer CASE Category
G STACEY ARC/C D LAUGHLIN 11-Astronomy
ARC/C M GILLESPIE

NAG 1-1543 Cornell University 6013
JET MIXING ENHANCEMENT BY FEEDBACK CONTROL
Period Obligations
09/16/1993-09/12/1994 FY94: \$80,570 TOTAL: \$260,570
Prin. Invest. NASA Tech. Officer CASE Category
J L LUMLEY LARC/J M SEINER 41-Aero Engr
LARC/M K PONTON

NAG 2-893 Cornell University 6021
FORMAL SUPPORT FOR HIGH ASSURANCE SYSTEMS
Period Obligations
04/06/1994-03/31/1995 FY94: \$140,000 TOTAL: \$140,000
Prin. Invest. NASA Tech. Officer CASE Category
F B SCHNEIDER ARC/P E FRIEDLAND 22-Computer Science

NAG 2-207 Cornell University 6014
MEDIUM AND HIGH RESOLUTION INFRARED SPECTROSCOPY F ROM
THE G.P. KUIPER AIRBORNE OBSERVATORY
Period Obligations
11/01/1989-09/30/1994 FY94: \$58,946 TOTAL: \$2,069,169
Prin. Invest. NASA Tech. Officer CASE Category
T HERTER ARC/C D LAUGHLIN 11-Astronomy
T L HERTER

NAG 2-926 Cornell University 6022
MID-INFRARED SPECTROSCOPY FROM THE GP KUIPER (C-14 1)
AIRBORNE OBSERVATORY
Period Obligations
08/30/1994-05/31/1995 FY94: \$103,385 TOTAL: \$103,385
Prin. Invest. NASA Tech. Officer CASE Category
T HERTER ARC/C D LAUGHLIN 11-Astronomy
ARC/C M GIBLLESPIE

NAG 2-554 Cornell University 6015
TILT ROTOR AIRCRAFT AEROACOUSTICS
Period Obligations
01/01/1989-09/30/1994 FY94: \$44,993 TOTAL: \$367,694
Prin. Invest. NASA Tech. Officer CASE Category
A R GEORGE ARC/C KITAPLIOGLU 41-Aero Engr
ARC/W WARMBRODT

NAG 3-349 Cornell University 6023
STALL-RECOVERY RESEARCH
Period Obligations
11/08/1982-06/30/1993 FY94: \$0 TOTAL: \$610,818
Prin. Invest. NASA Tech. Officer CASE Category
F K MOORE LERC/F A NEWMAN 41-Aero Engr

NAG 2-660 Cornell University 6016
DEVELOPMENT AND EVALUATION OF SI BIB DETECTORS FO R
SIRTF
Period Obligations
07/31/1990-11/30/1994 FY94: \$130,000 TOTAL: \$520,000
Prin. Invest. NASA Tech. Officer CASE Category
T L HERTER ARC/C R MCCREIGHT 11-Astronomy
ARC/R E MCMURRAY JR.

NAG 3-987 Cornell University 6024
THE COMBUSTION OF FREE OR UNSUPPORTED DROPLETS AT LOW
GRAVITY
Period Obligations
02/07/1989-02/27/1993 FY94: \$0 TOTAL: \$182,852
Prin. Invest. NASA Tech. Officer CASE Category
C T AVEDISIAN LERC/J B HAGGARD 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 3-1069 Cornell University 6025
WAVE PROCESSES APPLIED TO AEROPROPULSION
Period *Obligations*
09/22/1989-02/24/1994 FY94: \$0 TOTAL: \$593,418
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E L RESLER LERC/F A NEWMAN 41-Aero Engr

NAG 3-1114 Cornell University 6026
NOX POLLUTION FROM JET ENGINES
Period *Obligations*
03/13/1990-04/19/1994 FY94: \$0 TOTAL: \$385,424
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Z L RESLER LERC/C M LEE 41-Aero Engr

NAG 3-1358 Cornell University 6027
ACCESS CONTROL FOR DISTRIBUTED STORAGE SYSTEMS RESEARCH
Period *Obligations*
07/01/1992-01/04/1995 FY94: \$99,819 TOTAL: \$199,712
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A HANUSHEVSKY LERC/G L WEEGMANN 22-Computer Science

NAG 3-1401 Cornell University 6028
FLOW-INFLUENCED SHAPE STABILITY IN LOW GRAVITY
Period *Obligations*
12/23/1992-01/13/1995 FY94: \$85,000 TOTAL: \$170,159
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P H STEEN LERC/A T CHAI 19-Phys Sci, NEC

NAG 3-1451 Cornell University 6029
NUMERICAL MODELING OF LOW-DENSITY PLUMES USING A M ONTE CARLO TECHNIQUE
Period *Obligations*
03/12/1993-01/24/1995 FY94: \$84,999 TOTAL: \$134,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I D BOYD LERC/P F PENKO 13-Physics

NAG 3-1570 Cornell University 6030
HISTORY DEPENDENT TURBULENCE MODELING
Period *Obligations*
02/15/1994-02/14/1995 FY94: \$52,479 TOTAL: \$52,479
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LUMLEY LERC/L A POVINELLI 41-Aero Engr

NAG 5-601 Cornell University 6031
A NEW TECHNIQUE
Period *Obligations*
02/01/1982-03/31/1995 FY94: \$94,143 TOTAL: \$1,866,901
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M KINTNER GSFC/L J EARLY 13-Physics
M C KELLEY GSFC/R H PLESS

NAG 5-666 Cornell University 6032
RADAR SUPPORT FOR ROCKET STUDY
Period *Obligations*
05/04/1990-04/30/1995 FY94: \$50,000 TOTAL: \$418,681
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E SWARTZ GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-681 Cornell University 6033
ANALYSIS OF INTERFEROMETRIC PLASMA WAVE DATA NEAR THE ELECTRON PLASMA AND GYROFREQUENCIES
Period *Obligations*
04/30/1991-04/30/1994 FY94: \$0 TOTAL: \$83,434
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P KINTNER GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-687 Cornell University 6034
WISP2 A PROPOSAL TO REFLY WISP1 'WISP2' A PROPOSAL TO REFLY WISP1
Period *Obligations*
06/20/1991-03/31/1995 FY94: \$0 TOTAL: \$338,778
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P KINTNER GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-691 Cornell University 6035
SOUNDING OF THE CLEFT ION FOUNTAIN ENERGIZATION REGION (SCIFER)
Period *Obligations*
05/26/1992-05/31/1995 FY94: \$192,000 TOTAL: \$330,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P KINTNER GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-813 Cornell University 6036
PARTICIPATION IN THE VAYAGUE INFRARED SPECTROSCOPY EXPERIMENT
Period *Obligations*
10/15/1986-12/31/1994 FY94: \$86,208 TOTAL: \$528,314
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J GIERASCH GSFC/B J CONRATH 31-Atmos Sci

NAG 5-1307 Cornell University 6037
INVESTIGATIONS IN SUPPORT OF THE ANTARACTIC GAMMA-RAY
Period *Obligations*
11/03/1989-11/30/1993 FY94: \$0 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S W SQUIRES GSFC/J I TROMBKA 19-Phys Sci, NEC

NAG 5-1378 Cornell University 6038
MEASUREMENT AND ANALYSIS OF PROFILES THRU ATMOSPHERE
Period *Obligations*
04/25/1990-06/30/1994 FY94: \$0 TOTAL: \$257,448
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W BRUTSAERT GSFC/F G HALL 31-Atmos Sci

NAG 5-1452 Cornell University 6039
ROTATION DRIVE PULSAR MAGNETOSPHERES/IONIZED
Period *Obligations*
08/27/1990-06/30/1993 FY94: \$0 TOTAL: \$158,772
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M CORDES GSFC/J P MORRIS 11-Astronomy
GSFC/D A KNIFFEN

NAG 5-1545 Cornell University 6040
STUDIES OF THE VELOCITY AND DENSITY SPECTRAL OF IONOSPHERIC PLASMA INSTABILITIES USING THE ATMOSPHERIC
Period *Obligations*
04/17/1991-04/30/1994 FY94: \$0 TOTAL: \$192,409
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M G KELLEY GSFC/G D BULLOCK 19-Phys Sci, NEC

NASA'S UNIVERSITY PROGRAM **NEW YORK (Continued)**

NAG 5-1563 **Cornell University** **6041**
STATISTICS OF GAMMA RAY BURSTS
Period *Obligations*
04/18/1991-10/31/1993 FY94: \$0 TOTAL: \$38,545
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I M WASSERMAN GSFC/J P NORRIS 11-Astronomy
GSFC/D A KNIFFEN

NAG 5-1669 **Cornell University** **6042**
AVERAGE FLUXES FROM FIR CO-ADDS: METHODOLOGY DWARF GALAXIES, EVOLUTION AND GALAXY PAIRS
Period *Obligations*
06/27/1991-06/30/1993 FY94: \$0 TOTAL: \$58,607
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F F SALPETER GSFC/D WEST 11-Astronomy

NAG 5-1758 **Cornell University** **6043**
BAYESIAN ANALYSIS OF GAMMA-RAY DATA AND THE FORMAT ION OF THE GAMMA-RAY BURST CONTINUUM
Period *Obligations*
09/17/1991-09/30/1993 FY94: \$49,759 TOTAL: \$149,291
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T J LOREDO GSFC/J P NORRIS 11-Astronomy
GSFC/C A GEHRELS

NAG 5-2120 **Cornell University** **6044**
ARE MIRAS WITH MASERS SYMBIOTIC STARS
Period *Obligations*
10/08/1992-03/31/1995 FY94: \$15,410 TOTAL: \$23,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B M LEWIS GSFC/D WEST 11-Astronomy

NAG 5-2334 **Cornell University** **6045**
CLUMPINESS AND SHOCK EFFECTS IN MONOCEROS R2 CLOUD
Period *Obligations*
08/12/1993-08/31/1994 FY94: \$29,048 TOTAL: \$29,048
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P GOLDSMITH GSFC/D WEST 11-Astronomy

NAG 5-2436 **Cornell University** **6046**
MULTIWAVELENGTH STUDIES OF ROTATION - DRIVEN PULSARS
Period *Obligations*
11/16/1993-11/30/1994 FY94: \$61,500 TOTAL: \$61,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M CORDES GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-5008 **Cornell University** **6047**
AMICIST AURORAL MICROPHYSICS AND ION CONICS: INVESTIGATION
Period *Obligations*
05/12/1993-12/31/1994 FY94: \$163,545 TOTAL: \$213,958
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P KINTNER GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-5009 **Cornell University** **6048**
AMICIST A STUDY OF ELECTROMAGNETIC PULSE FROM LIGHTNING AND
Period *Obligations*
05/12/1993-12/31/1994 FY94: \$248,383 TOTAL: \$346,675
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M C KELLEY GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 9-715 **Cornell University** **6049**
DEFINITION OF PROBLEMS IN DESIGN AND OPERATION OF CONTROLLED ENVIRONMENT LIFE SUPPORT SYSTEM
Period *Obligations*
09/25/1993-01/01/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W LANGHANS JSC/T TRI 51-Biological Sci

NAGW 310 **Cornell University** **6050**
STUDIES OF PLANETARY RINGS
Period *Obligations*
03/15/1982-09/30/1994 FY94: \$113,625 TOTAL: \$1,090,170
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A BURNS HQ/J UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 493 **Cornell University** **6051**
TEMPLATE REACTIONS AND CHEMICAL EVOLUTION
Period *Obligations*
06/01/1983-12/31/1994 FY94: \$0 TOTAL: \$641,515
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A USHER HQ/J RUMMEL 12-Chemistry
HQ/M AVERNER

NAGW 544 **Cornell University** **6052**
DYNAMICAL STUDIES OF SATURN'S RINGS
Period *Obligations*
03/01/1984-09/30/1994 FY94: \$52,800 TOTAL: \$383,635
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P D NICHOLSON HQ/J R UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 666 **Cornell University** **6053**
THEOR PHYS OF ACCRETING MAG NEUTRON STARS/X-RAY EMISSION
Period *Obligations*
11/01/1984-10/31/1994 FY94: \$78,480 TOTAL: \$613,388
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E E SALPETER HQ/L J KALUZIENSKI 11-Astronomy
HQ/A BUNNER

NAGW 1023 **Cornell University** **6054**
GEOLOGIC STUDIES OF MARS AND OUTER PLANETS
Period *Obligations*
11/01/1986-09/30/1994 FY94: \$125,050 TOTAL: \$935,759
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S SQUYRES HQ/J UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 1420 **Cornell University** **6055**
IMPLICATIONS OF CONVECTION WITHIN THE MOON AND TERR. PLANETS
Period *Obligations*
08/18/1988-09/30/1994 FY94: \$35,000 TOTAL: \$135,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L TURCOTTE HQ/J R UNDERWOOD 32-Geological Sci

NAGW 1444 **Cornell University** **6056**
LOW-TEMPERATURE THERMODYNAMICS AND LIQUID-VAPOR EQUILIBRIA
Period *Obligations*
08/26/1988-10/31/1994 FY94: \$75,814 TOTAL: \$391,360
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W R THOMPSON HQ/K FOX 11-Astronomy
HQ/W L QUIADE

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAGW 1870 Cornell University 6057
 INTERDISCIPLINARY INVESTIGATIONS OF COMPARATIVE PLANETARY
 ANETOLOGY
Period Obligations
 03/13/1990-09/30/1994 FY94: \$75,000 TOTAL: \$342,685
Prin. Invest. NASA Tech. Officer CASE Category
 C SAGAN HQ/T A MAXWELL 32-Geological Sci

NAGW 1896 Cornell University 6058
 EXOBIOLGY AND THE ORIGIN OF LIFE
Period Obligations
 11/16/1989-03/31/1994 FY94: \$120,352 TOTAL: \$720,352
Prin. Invest. NASA Tech. Officer CASE Category
 C SAGAN HQ/M MEYER 12-Chemistry

NAGW 1997 Cornell University 6059
 STUDIES OF THERMAL STRUCTURES AND MOTIONS OF PLANETARY
 ATMOSPHERES
Period Obligations
 03/16/1990-11/30/1994 FY94: \$102,600 TOTAL: \$535,826
Prin. Invest. NASA Tech. Officer CASE Category
 P GIERASCH HQ/J T BERGSTRALH 11-Astronomy

NAGW 2011 Cornell University 6060
 GENERATION OF DOUBLE LAYERS AND LOW-FREQUENCY TURBULENCE
 BY KINETIC WAVES
Period Obligations
 05/05/1990-03/31/1995 FY94: \$45,750 TOTAL: \$284,500
Prin. Invest. NASA Tech. Officer CASE Category
 N F OTANI HQ/M M MELLOTT 13-Physics
 HQ/T PERRY

NAGW 2084 Cornell University 6061
 STUDY OF THE EFFECTS OF PHOTOMETRIC GEOMETRY ON SPECTRAL
 REFLECTANCE MEASUREMENTS
Period Obligations
 05/30/1990-09/30/1994 FY94: \$66,800 TOTAL: \$311,500
Prin. Invest. NASA Tech. Officer CASE Category
 J VEVERKA HQ/T A MAXWELL 32-Geological Sci

NAGW 2149 Cornell University 6062
 SPACECRAFT PLANETARY IMAGING FACILITY
Period Obligations
 06/13/1990-12/31/1994 FY94: \$32,750 TOTAL: \$154,506
Prin. Invest. NASA Tech. Officer CASE Category
 J VEVERKA HQ/T A MAXWELL 32-Geological Sci

NAGW 2186 Cornell University 6063
 PHYSICAL STUDIES OF PLANETARY AND SATELLITE SURFACES
Period Obligations
 03/01/1991-09/30/1994 FY94: \$76,000 TOTAL: \$301,892
Prin. Invest. NASA Tech. Officer CASE Category
 J VEVERKA HQ/T A MAXWELL 32-Geological Sci

NAGW 2224 Cornell University 6064
 NAGW-2224/CORNELL UNIV/GLOBULAR CLUSTER EVOLUTION
Period Obligations
 08/30/1990-12/31/1994 FY94: \$101,478 TOTAL: \$455,476
Prin. Invest. NASA Tech. Officer CASE Category
 D F CHERNOFF HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2225 Cornell University 6065
 INVESTIGATION OF THE CONDITIONS REQUIRED FOR SMALL SCALE
 FLUVIAL ACTIVITY ON MARS
Period Obligations
 06/07/1991-10/31/1993 FY94: \$0 TOTAL: \$75,000
Prin. Invest. NASA Tech. Officer CASE Category
 S W SQUIRES HQ/T A MAXWELL 11-Astronomy

NAGW 2293 Cornell University 6066
 MAGNETOHYDRODYNAMICS OF PROTOSTELLAR NEBULAE
Period Obligations
 05/22/1991-01/31/1995 FY94: \$20,000 TOTAL: \$80,000
Prin. Invest. NASA Tech. Officer CASE Category
 LOVELACE HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2364 Cornell University 6067
 ASTROPHYSICAL STUDIES OF COMPACT STARS ON A SUPERCOMPUTER
Period Obligations
 02/25/1991-01/31/1995 FY94: \$35,500 TOTAL: \$275,500
Prin. Invest. NASA Tech. Officer CASE Category
 S L SHAPIRO HQ/G S KUTTER 11-Astronomy
 HQ/G R RIEGLER

NAGW 2374 Cornell University 6068
 IN SITU INVESTIGATION MARTIAN VOLATILES, GEOCHEMISTRY, AND
 MINERALOGY
Period Obligations
 07/09/1991-01/31/1995 FY94: \$31,925 TOTAL: \$80,803
Prin. Invest. NASA Tech. Officer CASE Category
 S SQUIRES HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2434 Cornell University 6069
 ANALYSIS OF VOYAGER DATA ON NEPTUNE'S RINGS
Period Obligations
 03/22/1991-12/31/1992 FY94: \$0 TOTAL: \$68,603
Prin. Invest. NASA Tech. Officer CASE Category
 P D NICHOLSON HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2551 Cornell University 6070
 NAGW-2551/AN INFRARED CAMERA/SPECTROGRAPH FOR THE
 PALOMAR OBSERVATORY
Period Obligations
 06/11/1991-06/30/1995 FY94: \$90,000 TOTAL: \$311,000
Prin. Invest. NASA Tech. Officer CASE Category
 J R HOUCK HQ/M D BICAY 11-Astronomy

NAGW 2638 Cornell University 6071
 TECTONIC/CLIMATIC DYNAMICS AND CRUSTAL EVOLUTION IN THE
 ANDEAN OROGEN
Period Obligations
 08/02/1991-12/31/1994 FY94: \$450,000 TOTAL: \$1,470,000
Prin. Invest. NASA Tech. Officer CASE Category
 B ISACKS HQ/M BALTUCK 39-Env Sci, NEC
 T E JORDAN HQ/B J MALCOLM
 A L BLOOM

NAGW 2768 Cornell University 6072
 LABORATORY MEASUREMENTS OF CELESTIAL SOLIDS
Period Obligations
 11/15/1991-10/31/1995 FY94: \$55,618 TOTAL: \$174,903
Prin. Invest. NASA Tech. Officer CASE Category
 A J SIEVERS HQ/L J CAROFF 11-Astronomy
 S V BECKWITH HQ/M D BICAY

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAGW 2870 **Cornell University** **6073**
THE DEVELOPMENT OF INFRARED DETECTORS AND MECHANISMS FOR USE IN FUTURE INFRARED SPACE MISSIONS
Period *Obligations*
02/03/1992-02/28/1995 FY94: \$480,000 TOTAL: \$3,916,070
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R HOUCK HQ/L J CAROFF 11-Astronomy

NAGW 2916 **Cornell University** **6074**
RADIATIVE-DYNAMICAL EFFECTS DUE TO CLOUDS ON THE OUTER PLANETS
Period *Obligations*
02/27/1992-03/31/1994 FY94: \$0 TOTAL: \$101,970
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J GIERASCH HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2938 **Cornell University** **6075**
THEORETICAL INVESTIGATION OF THE DYNAMICS OF PATTERNS AND SCALE IN A SERPENTINE GRASSLAND
Period *Obligations*
02/28/1992-11/30/1994 FY94: \$0 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S A LEVIN HQ/M M AVERNER 59-Life Sci, NEC

NAGW 2960 **Cornell University** **6076**
THEORY AND SIMULATION OF ELECTROMAGNETIC WAVE PHENOMENA
Period *Obligations*
03/03/1992-12/31/1994 FY94: \$21,000 TOTAL: \$100,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C E SEYLER HQ/D L REASONER 13-Physics
HQ/J D BOHLIN

NAGW 3273 **Cornell University** **6077**
STUDIES OF SATELLITE AND PLANETARY ATMOSPHERES
Period *Obligations*
11/16/1992-10/31/1994 FY94: \$75,127 TOTAL: \$151,880
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C SAGAN HQ/J T BERGSTRAHL 19-Phys Sci, NEC

NAGW 3274 **Cornell University** **6078**
SURFACE WINDS ON MARS; SEASONAL AND TOPOGRAPHIC EFFECTS ON FLOW AND SEDIMENT TRANSPORT
Period *Obligations*
11/16/1992-10/31/1993 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P C THOMAS HQ/H C BRINTON 32-Geological Sci

NAGW 3275 **Cornell University** **6079**
NAGW-3275/CORNELL UNIV/SHAPES, SURFACES AND INTERIORS OF SATELLITES AND ASTEROIDS
Period *Obligations*
11/13/1992-10/31/1994 FY94: \$36,000 TOTAL: \$70,477
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P C THOMAS HQ/H C BRINTON 32-Geological Sci

NAGW 3283 **Cornell University** **6080**
NAGW-3283/CORNELL UNIV/DEVELOPMENT OF A MARS SURFACE IMAGER
Period *Obligations*
12/21/1992-09/30/1994 FY94: \$0 TOTAL: \$187,956
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S W SQUIRES HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3320 **Cornell University** **6081**
SMALL BODIES SCIENCE WORKING GROUP
Period *Obligations*
12/31/1992-12/31/1993 FY94: \$0 TOTAL: \$70,969
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J VEERKA HQ/C B PILCHER 39-Env Sci, NEC

NAGW 3341 **Cornell University** **6082**
NAGW-3341/CORNELL UNIV/GRAVITY-INDUCED POLARITY OF TRANSPORT IN PLANTS
Period *Obligations*
01/26/1993-11/30/1994 FY94: \$60,000 TOTAL: \$120,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R WAYNE HQ/T W HALSTEAD 51-Biological Sci

NAGW 3487 **Cornell University** **6083**
ANALYSIS OF DATA FROM THE MAGELLAN SATELLITE FOR THE SURFACE OF VENUS/NAGW-3487/CORNELL UNIV
Period *Obligations*
03/27/1993-03/14/1995 FY94: \$36,000 TOTAL: \$86,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S W SQUIRES HQ/P R ROGERS 32-Geological Sci

NAGW 3591 **Cornell University** **6084**
ASTEROID STUDIES
Period *Obligations*
05/20/1993-12/31/1993 FY94: \$0 TOTAL: \$76,414
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J VEERKA HQ/H C BRINTON 11-Astronomy

NAGW 3597 **Cornell University** **6085**
AN INTEGRATED THERMAL AND TECTONIC MODEL FOR VENUS
Period *Obligations*
05/21/1993-04/30/1995 FY94: \$0 TOTAL: \$45,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L TURCOTTE HQ/J T BERGSTRAHL 32-Geological Sci

NAGW 3837 **Cornell University** **6086**
NAGW-3837/B CORNELL UNIV. "COORDINATED STUDY OF ATMOSPHERE AND SURFACE CHANGES." 11/1/93 START
Period *Obligations*
12/17/1993-10/31/1994 FY94: \$60,329 TOTAL: \$60,329
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J VEERKA HQ/J H RAHE 11-Astronomy

NAGW 3925 **Cornell University** **6087**
CORNELL UNIV; SPIFI: AN IMAGING FABRY-PEROT SPECTROMETER FOR USE ON ASTEROIDS
Period *Obligations*
04/14/1994-03/31/1995 FY94: \$65,987 TOTAL: \$65,987
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G STACEY HQ/L J CAROFF 11-Astronomy
HQ

NAGW 3985 **Cornell University** **6088**
SURFACE—PROPERTIES OF THE MOON, VENUS AND SMALL BODIES FROM RADAR
Period *Obligations*
05/20/1994-09/30/1995 FY94: \$36,693 TOTAL: \$36,693
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D CAMPBELL HQ/R WILLIAMS 32-Geological Sci

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAGW 4001			
Cornell University		6089	
PALOMAR OBSERVATIONS OF THE COLLISION OF COMET SHOEMAKER-LEVY 9			
<i>Period</i>		<i>Obligations</i>	
05/20/1994-09/30/1994	FY94: \$23,000	TOTAL: \$23,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P NICHOLSON	HQ/J H RAHE	11-Astronomy	
NAGW 4062			
Cornell University		6090	
ELASTIC AND THERMAL MEASUREMENTS ON PURE AND DOPED AMORPHOUS ICE			
<i>Period</i>		<i>Obligations</i>	
06/23/1994-02/28/1995	FY94: \$15,000	TOTAL: \$15,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R POHL	HQ/P ROGERS	12-Chemistry	
NAS 5-31723			
Cornell University		6091	
EOS INVESTIGATION 'GLOBAL HYDROLOGIC PROCESSES AND CLIMATE'			
<i>Period</i>		<i>Obligations</i>	
12/10/1991-12/10/1996	FY94: \$130,000	TOTAL: \$423,250	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W BRUTSAERT	GSFC/W LAU	39-Env Sci, NEC	
NAS 8-36687			
Cornell University		6092	
STUDY ENTITLED 'DEFINITION PHASE OF THE NASA CRRES MISSION'			
<i>Period</i>		<i>Obligations</i>	
08/30/1985-05/31/1993	FY94: \$0	TOTAL: \$1,143,035	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M KELLEY	MSFC/J F STONE	31-Atmos Sci	
	MSFC/L RICHARDS		
NCA 2-640			
Cornell University		6093	
STUDIES OF RING OCCULTATION DATA FROM VOYAGER			
<i>Period</i>		<i>Obligations</i>	
07/19/1991-06/30/1993	FY94: \$0	TOTAL: \$25,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P D NICHOLSON	ARC/J N CUZZI	11-Astronomy	
NCA 2-731			
Cornell University		6094	
TEMPERATURE IN COLLAPSING MOLECULAR CLOUDS			
<i>Period</i>		<i>Obligations</i>	
07/10/1992-01/15/1993	FY94: \$0	TOTAL: \$9,479	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J VEVERKA	ARC/J B POLLACK	13-Physics	
NCA 2-820			
Cornell University		6095	
DEVELOPMENT OF A HYBRID COMPUTATIONAL METHODOLOGY FOR SIMULATION OF HYPERSONIC TRANSITIONAL FLOWS			
<i>Period</i>		<i>Obligations</i>	
06/03/1993-05/31/1995	FY94: \$20,000	TOTAL: \$59,997	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
I BOYD	ARC/G S DEIWERT	41-Aero Engr	
NCA 2-832			
Cornell University		6096	
STUDIES OF EARTH-BASED OCCULTATION DATA			
<i>Period</i>		<i>Obligations</i>	
07/21/1993-06/30/1995	FY94: \$16,162	TOTAL: \$37,126	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P D NICHOLSON	ARC/J N CUZZI	11-Astronomy	
NGT 00-030-065			
Cornell University		6097	
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>		<i>Obligations</i>	
09/01/1991-08/31/1995	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R J QUALLS	HQ/D M BUTLER	39-Env Sci, NEC	
W BRUTSAERT	HQ/G S WILSON		
NGT 00-040-012			
Cornell University		6098	
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM			
<i>Period</i>		<i>Obligations</i>	
10/04/1989-01/31/1995	FY94: \$380,000	TOTAL: \$1,840,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P J GIERASCH	HQ/E T SCHWARTZ	99-Multi-Discip	
NGT 00-050-654			
Cornell University		6099	
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>	
09/11/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T E JORDAN	HQ/F C OWENS	32-Geological Sci	
NGT 00-050-664			
Cornell University		6100	
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>	
08/23/1990-08/14/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P M KINTNER	HQ/F C OWENS	13-Physics	
NGT 00-050-786			
Cornell University		6101	
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>	
05/13/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R L CONSTABLE	HQ/F C OWENS	22-Computer Science	
P B JACKSON			
NGT 00-050-842			
Cornell University		6102	
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>	
08/20/1991-08/18/1995	FY94: \$22,000	TOTAL: \$88,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S B POPE	HQ/F C OWENS	42-Astro Engr	
NGT 00-050-845			
Cornell University		6103	
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>	
08/15/1991-08/18/1993	FY94: \$0	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S W SQUYRES	HQ/F C OWENS	13-Physics	
NGT 00-050-846			
Cornell University		6104	
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>	
08/30/1991-08/18/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P J GIERASCH	HQ/F C OWENS	11-Astronomy	
NGT 00-050-847			
Cornell University		6105	
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>	
08/12/1991-08/18/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S V BECKWITH	HQ/F C OWENS	11-Astronomy	

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NGT 00-050-850 Cornell University 6106
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-08/31/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
G FIELD HQ/F C OWENS 11-Astronomy

NGT 00-050-852 Cornell University 6107
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
T JORDAN HQ/F C OWENS 32-Geological Sci

NGT 00-050-912 Cornell University 6108
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/22/1992-06/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
C T AVEDISIAN HQ/J K ALEXANDER 46-Mech Engr

NGT 00-050-960 Cornell University 6109
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/15/1992-08/19/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
B ISACKS HQ/J ALEXANDER 13-Physics

NGT 00-051-075 Cornell University 6110
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/08/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R W ZOBEL HQ/R WHITE 51-Biological Sci

NGT 00-051-147 Cornell University 6111
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/29/1993-08/31/1996 FY94: \$22,000 TOTAL: \$40,500
Prin. Invest. NASA Tech. Officer CASE Category
K COOK HQ/G LESANE 31-Atmos Sci

NGT 00-051-211 Cornell University 6112
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/28/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
W BRUTSAERT GSFC/G SOFFEN 55-Agriculture Sci

NGT 00-051-223 Cornell University 6113
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/29/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
B L ISACKS HQ/A NOROTNY 32-Geological Sci
A L BLOOM

NGT 00-051-329 Cornell University 6114
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1994-08/22/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
C E SAGAN HQ/D HOLLAND 11-Astronomy

NGT 00-070-117 Cornell University 6115
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
06/06/1989-05/31/1993 FY94: TOTAL: \$61,999
Prin. Invest. NASA Tech. Officer CASE Category
M C KELLEY HQ/F C OWENS 45-Elec Engr

NGT 00-070-217 Cornell University 6116
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
04/30/1991-06/30/1995 FY94: \$22,000 TOTAL: \$88,000
Prin. Invest. NASA Tech. Officer CASE Category
M C KELLEY HQ/F C OWENS 45-Elec Engr

NGT 00-070-219 Cornell University 6117
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
06/25/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
M C KELLEY HQ/F C OWENS 42-Astro Engr

NGT 00-090-228 Cornell University 6118
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period Obligations
09/17/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
K PHILLIPS HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-239 Cornell University 6119
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMDF)
Period Obligations
07/15/1994-08/14/1994 FY94: \$6,000 TOTAL: \$6,000
Prin. Invest. NASA Tech. Officer CASE Category
W S GREEN HQ/D K RUSSELL 99-Multi-Discip

NSG-6020 Cornell University 6120
ROCKET INVESTIGATION OF NEUTRAL ATMOSPHERE - IONOSPHERE
COUPLING AND PLANETARY ELECTRODYNAMIC
Period Obligations
03/01/1978-04/30/1994 FY94: \$49,537 TOTAL: \$3,178,033
Prin. Invest. NASA Tech. Officer CASE Category
M C KELLEY GSFC/L J EARLY 19-Phys Sci, NEC
D T FARLEY GSFC/R H PLESS

NAGW 468 Hofstra University 6121
RADAR MEASUREMENTS OF OCEAN SURFACE WAVES USING THE
AIRCRAFT TWO FREQUENCY SCATTEROMETER
Period Obligations
05/24/1983-12/31/1994 FY94: \$81,830 TOTAL: \$843,873
Prin. Invest. NASA Tech. Officer CASE Category
D E WEISSMAN HQ/G S LAGERLOEF 33-Oceanography
HQ/W S WILSON

NCC 2-5091 Hunter College 6122
HUMAN INDUCED LAND TRANSFORMATIONS: GROWTH MODELING
WITH CELLULAR AUTOMATA
Period Obligations
07/28/1994-01/31/1995 FY94: \$11,294 TOTAL: \$11,294
Prin. Invest. NASA Tech. Officer CASE Category
K C CLARKE ARC/L GAYDOS 32-Geological Sci

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NGT 00-090-151 Hunter College 6123
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
11/16/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
G KRASLOVSKY HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-053 La Guardia Community College 6124
UNDERGRADUATE STUDENT RESEARCHERS PRG
Period Obligations
08/22/1991-08/31/1995 FY94: \$48,000 TOTAL: \$144,262
Prin. Invest. NASA Tech. Officer CASE Category
C WATKINS HQ/D K RUSSELL 45-Elec Engr

NGT 00-090-233 Manhattan College 6125
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
11/22/1993-08/14/1994 FY94: \$12,000 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
C H STOLZE HQ/D K RUSSELL 99-Multi-Discip

NAG 2-573 Mt Sinai Sch of Med of The Cuny 6126
EFFECTS OF MICROGRAVITY ON VELOCITY STORAGE
Period Obligations
05/04/1989-06/30/1994 FY94: \$21,335 TOTAL: \$991,722
Prin. Invest. NASA Tech. Officer CASE Category
B COHEN ARC/J P CONNOLLY 59-Life Sci, NEC
ARC/R W BALLARD

NAG 2-706 Mt Sinai Sch of Med of The Cuny 6127
VELOCITY STORAGE IN SPACE: ADAPTATION OF OPTOKIN ETIC
NYSTAGMUS AND AFTER-NYSTAGMUS TO MICROGRAVITY
Period Obligations
06/03/1991-12/31/1994 FY94: \$35,000 TOTAL: \$245,000
Prin. Invest. NASA Tech. Officer CASE Category
B COHEN ARC/C M WINGET 51-Biological Sci
T RAPHAN

NAG 2-804 Mt Sinai Sch of Med of The Cuny 6128
VELOCITY STORAGE AND MICROGRAVITY: INTERACTION OF VO R
ADAPTATION AND HABITUATION; DEPENDENCE OF THE ...
Period Obligations
09/18/1992-02/28/1995 FY94: \$77,600 TOTAL: \$232,800
Prin. Invest. NASA Tech. Officer CASE Category
B COHEN ARC/D L TOMKO 51-Biological Sci
T RAPHAN
M GIZZI

NAG 2-895 Mt Sinai Sch of Med of The Cuny 6129
OSTEOBLAST ADHESION AND PHENOTYPE IN MICROGRAVITY
Period Obligations
04/22/1994-12/31/1994 FY94: \$48,335 TOTAL: \$48,335
Prin. Invest. NASA Tech. Officer CASE Category
R J MAJESKA ARC/E M HOLTON 51-Biological Sci

NAG 1-1238 New York University 6130
EVALUATING TEST DATA ADEQUACY AND GENERATING TEST
CASES FOR SOFTWARE USING STATECHART SPECIFICATION
Period Obligations
03/21/1991-03/19/1994 FY94: \$0 TOTAL: \$155,173
Prin. Invest. NASA Tech. Officer CASE Category
E WEYUKER LARC/D E ECKHARDT 22-Computer Science

NAG 1-1448 New York University 6131
REAL TIME IDENTIFICATION OF MENTAL STATE FROM
ELECTROENCEPHALOGRAPHIC SIGNALS
Period Obligations
08/24/1992-09/01/1994 FY94: \$1 TOTAL: \$53,572
Prin. Invest. NASA Tech. Officer CASE Category
E R JOHN LARC/A T POPE 69-Psych, NEC
LARC/J R COMSTOCK

NAG 2-662 New York University 6132
EFFECTS OF SIMULATED WEIGHTLESS ON SPINAL CORD DE
VELOPMENT
Period Obligations
08/17/1990-05/31/1994 FY94: \$0 TOTAL: \$364,466
Prin. Invest. NASA Tech. Officer CASE Category
R R LLINAS ARC/M L CORCORAN 51-Biological Sci
K D WALTON ARC/N G DAUNTON

NAG 3-1414 New York University 6133
TWO-PHASE INTERFACES IN WEAK EXTERNAL FIELDS
Period Obligations
01/08/1993-12/31/1994 FY94: \$75,000 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
J K PERCUS LERC/R A WILKINSON 13-Physics

NAGW 630 New York University 6134
PHYSICAL PROPERTIES OF MOLECULAR CLOUDS
Period Obligations
06/01/1984-01/31/1995 FY94: \$92,000 TOTAL: \$679,499
Prin. Invest. NASA Tech. Officer CASE Category
A E GLASSGOLD HQ/F C GILLET 11-Astronomy
HQ/E J WEILER

NAGW 3675 New York University 6135
SYMMETRY ANALYSIS OF MAGELLAN SAR ALTIMETRY AND GR
AVITY DATA
Period Obligations
07/14/1993-06/30/1994 FY94: \$0 TOTAL: \$31,240
Prin. Invest. NASA Tech. Officer CASE Category
C STEWART HQ/J T BERGSTRALH 32-Geological Sci

NAGW 4125 New York University 6136
CELSS CROP SIMULATIONS FOR SYSTEMS ENGINEERING AND
PRODUCTIVITY OPTIMIZATION
Period Obligations
08/24/1994-06/14/1995 FY94: \$120,000 TOTAL: \$120,000
Prin. Invest. NASA Tech. Officer CASE Category
T VOLK HQ/M M AVERNER

NCA 2-587 New York University 6137
IMAGE FUSION FOR SYNTHETIC VISION
Period Obligations
01/25/1991-07/31/1993 FY94: \$0 TOTAL: \$79,895
Prin. Invest. NASA Tech. Officer CASE Category
M PAVEL ARC/A AHUMADA 61-Biol Aspects
ARC

NCC 8-24 Niagara University 6138
DEVELOPMENT AND TESTING FOR LIGHTNING IMAGING SENSOR
Period Obligations
06/16/1993-10/15/1994 FY94: \$0 TOTAL: \$30,788
Prin. Invest. NASA Tech. Officer CASE Category
W L BOECK MSFC/R BLAKESLEE 22-Computer Science

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NCC 8-55			Niagara University	6139
LIGHTNING IMAGING SENSOR STUDY				
<i>Period</i>		<i>Obligations</i>		
08/17/1994-08/16/1995	FY94: \$33,863	TOTAL: \$33,863		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
W BOECK	MSFC/R BLAKESLEE	31-Atmos Sci		
	MSFC/H CHRISTIAN			
NAG 1-1272			Polytechnic Institute of New York	6140
STUDY OF IN-SERVICE DIGITAL AVIONICS SYSTEM FAULT DATA ANALYSIS, DATA GATHERING, AND INTERPRETATION				
<i>Period</i>		<i>Obligations</i>		
06/12/1991-11/30/1993	FY94: \$15,795	TOTAL: \$121,926		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M L SHOOMAN	LARC/F L PITTS	45-Elec Engr		
	LARC/C W MEISSNER			
NAG 1-1387			Polytechnic Institute of New York	6141
ULTRASONIC MONITORING OF DIRECTIONAL SOLIDIFICATION				
<i>Period</i>		<i>Obligations</i>		
02/28/1992-05/01/1994	FY94: \$4,788	TOTAL: \$332,358		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
D M SCHLEICH	LARC/A L FRIPP	19-Phys Sci, NEC		
NAG 3-1301			Polytechnic Institute of New York	6142
DUAL-LINE RAYLEIGH SCATTERING DIAGNOSTICS TECHNIQUE FOR THE COMBUSTION OF HYDROCARBON				
<i>Period</i>		<i>Obligations</i>		
10/24/1991-11/16/1994	FY94: \$65,000	TOTAL: \$162,832		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M V OTUGEN	LERC/R G SEASHOLTZ	49-Engr, NEC		
NAG 3-1378			Polytechnic Institute of New York	6143
EXPERIMENTAL STUDIES ON SHOCK WAVE-VORTEX INTERACTION IN A SUPERSONIC STREAM				
<i>Period</i>		<i>Obligations</i>		
11/02/1992-01/20/1995	FY94: \$37,186	TOTAL: \$69,965		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
I M KALKHORAN	LERC/W R HINGST	41-Aero Engr		
NAG 5-1051			Polytechnic Institute of New York	6144
CHAMBER EXPERIMENTS FOR SIMULATING THE CERTIFICIAL PLASMA LAYERS PRODUCED IN THE UPPER ATMOSPHERE				
<i>Period</i>		<i>Obligations</i>		
06/15/1988-09/14/1993	FY94: \$0	TOTAL: \$206,605		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
S P KUO	GSFC/R F BENSON	13-Physics		
NAG 8-960			Polytechnic Institute of New York	6145
DIFFUSION, VISCOSITY AND CRYSTAL GROWTH IN MICROGRAVITY				
<i>Period</i>		<i>Obligations</i>		
05/21/1993-05/31/1995	FY94: \$120,000	TOTAL: \$240,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
A S MYERSON	MSFC/R L KROES	12-Chemistry		
A IZMAILOV				
NAG 8-1060			Polytechnic Institute of New York	6146
NUCLEATION AND CLUSTER FORMATION IN EVAPORATED DROPLETS				
<i>Period</i>		<i>Obligations</i>		
06/14/1994-06/15/1995	FY94: \$50,000	TOTAL: \$50,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
S ARNOLD	MSFC/E C ETHRIDGE	47-Materials Engr		
NCC 1-190			Polytechnic Institute of New York	6147
USE OF SOFTWARE PRODUCT SERVICE HISTORY FOR CERTIFICATION CREDIT: A STUDY OF FIELD DATA AND CERTI				
<i>Period</i>		<i>Obligations</i>		
05/26/1994-01/15/1995	FY94: \$83,474	TOTAL: \$83,474		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M L SHOOMAN	LARC/C W MEISSNER	22-Computer Science		
	LARC/F SHIPMAN			
NCC 2-172			Polytechnic Institute of New York	6148
GEOMETRICAL ACOUSTICS AND TRANSONIC HELICOPTER SOUND				
<i>Period</i>		<i>Obligations</i>		
02/01/1982-10/31/1993	FY94: \$0	TOTAL: \$518,383		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M P ISOM	ARC/Y M YU	41-Aero Engr		
	ARC/Y H YU			
NAG 1-980			Rensselaer Polytechnic Institute	6149
PREPARATION AND POLYMERIZATION OF NEW SILICON-CONTAINING MONOMERS FOR USE IN COATINGS FOR SPACE ST				
<i>Period</i>		<i>Obligations</i>		
04/24/1989-09/30/1994	FY94: \$0	TOTAL: \$215,281		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J V CRIVELLO	LARC/J W CONNELL	12-Chemistry		
	LARC/P M HERGENROTHER			
NAG 1-1269			Rensselaer Polytechnic Institute	6150
NEURAL NETWORK BASED DECOMPOSITION IN MULTI-LEVEL OPTIMAL DESIGN				
<i>Period</i>		<i>Obligations</i>		
05/29/1991-08/15/1994	FY94: \$0	TOTAL: \$100,113		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
P HAJELA	LARC/J L ROGERS	22-Computer Science		
	LARC/J SOBIESKI			
NAG 1-1356			Rensselaer Polytechnic Institute	6151
ADAPTIVE MULTISCALE COMPUTATIONAL TECHNIQUES IN LAMINATED COMPOSITES				
<i>Period</i>		<i>Obligations</i>		
12/19/1991-12/11/1994	FY94: \$36,055	TOTAL: \$176,055		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J FISH	LERC/J T WANG	46-Mech Engr		
P L BAEHMANN	LERC/D D DAVIS JR			
NAG 1-1413			Rensselaer Polytechnic Institute	6152
PATH PLANNING FOR ROBOTIC TRUSS ASSEMBLY				
<i>Period</i>		<i>Obligations</i>		
03/24/1992-09/22/1993	FY94:	TOTAL: \$33,268		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
A C SANDERSON	LARC/R W WILL	49-Engr, NEC		
G N SARIDIS	LARC/M D RHODES			
NAG 1-1469			Rensselaer Polytechnic Institute	6153
SIMULATION BASED PERFORMANCE ANALYSIS OF A ROBOTIC TESTBED CONTROL ARCHITECTURE NLPN 92-1004				
<i>Period</i>		<i>Obligations</i>		
12/22/1992-12/31/1994	FY94: \$75,000	TOTAL: \$150,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J HADDOCK	LARC/D L PALUMBO	12-Chemistry		
NAG 1-1520			Rensselaer Polytechnic Institute	6154
HOT-DOME ANEMOMETRY FOR FLIGHT MEASUREMENT OF FREE STREAM DISTURBANCES NLPN 93-342				
<i>Period</i>		<i>Obligations</i>		
06/07/1993-06/06/1994	FY94: \$25,722	TOTAL: \$35,722		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
B E THOMPSON	LARC/L P YIP	41-Aero Engr		

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 2-832 Rensselaer Polytechnic Institute 6155
PARALLEL UNSTRUCTURED GRID GENERATION FOR COMPUTATIONAL AEROSCIENCES
Period *Obligations*
04/02/1993-12/31/1994 FY94: \$76,735 TOTAL: \$149,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M S SHEPPARD ARC/T A LASINSKI 41-Aero Engr
ARC/E BARSZCZ

NAG 3-544 Rensselaer Polytechnic Institute 6156
MINORITY ENGINEERING PROGRAM BETWEEN NASA/RPI
Period *Obligations*
05/20/1984-07/28/1994 FY94: \$0 TOTAL: \$710,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N BURNETT LARC/R F LAWRENCE 49-Engr, NEC
LARC

NAG 3-1196 Rensselaer Polytechnic Institute 6157
NEURAL NETWORK APPLICATIONS IN STRUCTURAL MECHANICS AND DESIGN
Period *Obligations*
08/28/1990-02/27/1995 FY94: \$51,272 TOTAL: \$205,317
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P HAJELA LERC/L BERKE 41-Aero Engr

NAG 3-1375 Rensselaer Polytechnic Institute 6158
NON-INTRUSIVE DIAGNOSTIC DEVELOPMENT FOR A PLANAR SHEAR LAYER
Period *Obligations*
12/01/1992-08/31/1993 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H T NAGAMATSN LERC/C J MAREK 41-Aero Engr
L N MYRABO

NAG 3-1399 Rensselaer Polytechnic Institute 6159
AN EXPERIMENTAL STUDY OF THE VAPOR BUBBLE THERMOSYPHON BASED ON AUGMENTED YOUNG-LAPLACE EQUATION
Period *Obligations*
01/15/1993-11/30/1994 FY94: \$150,559 TOTAL: \$293,455
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P C WAYNER LERC/J A PLATT 46-Mech Engr
J L PLAWSKY

NAG 3-1400 Rensselaer Polytechnic Institute 6160
THE ANALYSIS OF PHASE DISTRIBUTION PHENOMENA IN MICROGRAVITY ENVIRONMENTS
Period *Obligations*
01/15/1993-11/30/1994 FY94: \$120,045 TOTAL: \$239,483
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R T LAHEY LERC/J B MCQUILLEN 49-Engr, NEC

NAG 3-1413 Rensselaer Polytechnic Institute 6161
GLOBAL INSTABILITY AND PATTERN FORMATION IN BINARY ALLOY SOLIDIFICATION
Period *Obligations*
01/27/1993-07/31/1994 FY94: \$0 TOTAL: \$85,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D COLE LERC/A CHAIT 47-Materials Engr
LERC/V PINES

NAG 3-1565 Rensselaer Polytechnic Institute 6162
STUDY OF DISILACYCLOBUTANE AS A SINGLE SOURCE PRECURSOR FOR EPI GROWTH OF SiC
Period *Obligations*
01/26/1994-11/25/1994 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L V INTERRANTE LERC/D J LARKIN 12-Chemistry

NAG 5-2392 Rensselaer Polytechnic Institute 6163
HOW DOES ENVIRONMENT AFFECT STAR FORMATION
Period *Obligations*
10/13/1993-10/14/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M L KUTNER GSFC/D WEST 11-Astronomy

NAG 8-864 Rensselaer Polytechnic Institute 6164
KINETICS OF DIFFUSIONAL DROPLET GROWTH LIQUID/ LIQUID TWO PHASE
Period *Obligations*
12/21/1990-03/31/1994 FY94: \$0 TOTAL: \$56,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M E GLIKSMAN MSFC/D FRAZIER 31-Atmos Sci
MSFC/B FAREMIRE

NAG 8-952 Rensselaer Polytechnic Institute 6165
CRYSTAL GROWTH STUDY
Period *Obligations*
02/10/1993-05/31/1995 FY94: \$89,844 TOTAL: \$179,676
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A G OSTROGORSKY MSFC/D C GILLIES 51-Biological Sci

NAGW 642 Rensselaer Polytechnic Institute 6166
SPEC REFLECTOR PROPERTIES OF METEORITIC MIN ASSEMBLY-INTERFACED ASTEROID MAT
Period *Obligations*
07/01/1984-09/30/1994 FY94: \$66,000 TOTAL: \$573,160
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J GAFFEY HQ/J R UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAGW 1333 Rensselaer Polytechnic Institute 6167
CENTER FOR INTELLIGENT ROBOTIC SYSTEM FOR SPACE EXP.
Period *Obligations*
07/15/1988-10/31/1995 FY94: \$48,960 TOTAL: \$5,536,252
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G N SARIDIS HQ/M D MONTEMERLO 49-Engr, NEC

NAGW 2781 Rensselaer Polytechnic Institute 6168
A LABORATORY INVESTIGATION OF SOME PHOTOCHEMICAL PROCESSES OF TITAN
Period *Obligations*
12/13/1991-10/31/1994 FY94: \$128,000 TOTAL: \$348,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J P FERRIS HQ/J D RUMMEL 12-Chemistry

NAGW 2817 Rensselaer Polytechnic Institute 6169
PROBING INFRARED SOURCES BY COMPUTER MODELING
Period *Obligations*
01/03/1992-11/30/1995 FY94: \$65,000 TOTAL: \$195,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C M LEUNG HQ/L J CAROFF 11-Astronomy

NAGW 3001 Rensselaer Polytechnic Institute 6170
THEORY OF GRAIN ALIGNMENT IN MOLECULAR CLOUDS
Period *Obligations*
03/11/1992-04/30/1994 FY94: \$0 TOTAL: \$69,926
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W G ROBERGE HQ/L J CAROFF 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAGW 3144 Rensselaer Polytechnic Institute 6171
THE ORIGIN AND EVOLUTION OF DUST IN INTERSTELLAR AND CIRCUMSTELLAR ENVIRONMENTS

Period	Obligations	
08/04/1992-09/30/1995	FY94: \$227,710	TOTAL: \$333,499
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D WHITTET	HQ/G R RIEGLER	11-Astronomy

NAGW 4039 Rensselaer Polytechnic Institute 6172
ISO OBSERVATIONS OF INTERSTELLAR DUST ABSORPTION

Period	Obligations	
06/17/1994-04/30/1995	FY94: \$12,997	TOTAL: \$12,997
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D C WHITTET	HQ/L J CAROFF	11-Astronomy

NAS 3-25368 Rensselaer Polytechnic Institute 6173
ISOTHERMAL DENDRITIC GROWTH

Period	Obligations	
12/15/1988-04/15/1998	FY94: \$400,000	TOTAL: \$1,823,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M E GLICKSMAN	LERC/E A WINSA	47-Materials Engr
	LERC/G A KRAFT	

NAS 8-38143 Rensselaer Polytechnic Institute 6174
VAPOR TRANSPORT CRYSTAL GROWTH

Period	Obligations	
10/17/1990-04/30/1994	FY94: \$0	TOTAL: \$782,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H WEIDEMEIER	MSFC/L P JETER	99-Multi-Discip

NAS 8-39723 Rensselaer Polytechnic Institute 6175
VAPOR TRANSPORT CRYSTAL GROWTH OF HGCDTE IN MICROGRAVITY

Period	Obligations	
06/24/1993-11/30/1996	FY94: \$296,896	TOTAL: \$390,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H WIEDEMEIER	MSFC/L JETER	99-Multi-Discip

NCC 2-5015 Rensselaer Polytechnic Institute 6176
THE FORMATION OF HYDROCARBONS IN THE OUTFLOWS FROM RED GIANTS

Period	Obligations	
11/30/1993-12/31/1994	FY94: \$25,203	TOTAL: \$25,203
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W ROBERGE	ARC/A G TIELENS	11-Astronomy

NCC 8-54 Rensselaer Polytechnic Institute 6177
INVESTIGATION OF LOCAL EFFECTS ON MICROSTRUCTURE EVOLUTION

Period	Obligations	
08/01/1994-07/31/1995	FY94: \$20,000	TOTAL: \$20,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M E GLICKSMAN	MSFC/D O FRAZIER	13-Physics

NGT 00-010-000 Rensselaer Polytechnic Institute 6178
NGT-10000/RENSSELAER POLY INST NY/INTELLIGENT CONTROL FOR DUAL ARM MANIPULATORS

Period	Obligations	
12/18/1992-10/31/1995	FY94: \$176,000	TOTAL: \$462,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A DESROCHERS	HQ/R J HAYDUK	49-Engr, NEC

NGT 00-010-017 Rensselaer Polytechnic Institute 6179
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP PROGRAM

Period	Obligations	
11/24/1993-03/31/1994	FY94: \$48,927	TOTAL: \$48,927
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G A GABRIELE	HQ/G S SEIDEL	41-Aero Engr
J C KORNGOLD	HQ/J R FACEY	

NGT 00-050-602 Rensselaer Polytechnic Institute 6180
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/06/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J P FERRIS	HQ/F C OWENS	12-Chemistry

NGT 00-050-918 Rensselaer Polytechnic Institute 6181
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/29/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J P FERRIS	HQ/J ALEXANDER	12-Chemistry

NGT 00-051-049 Rensselaer Polytechnic Institute 6182
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/14/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L N MYRABO	LERC/F MONTEGANI	41-Aero Engr
H T NAGAMATSU		

NGT 00-051-113 Rensselaer Polytechnic Institute 6183
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/14/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
Z RUSAK	LARC/E J PRIOR	41-Aero Engr

NGT 00-051-167 Rensselaer Polytechnic Institute 6184
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/22/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D W SCHWENDEMAN	HQ/P HUNTER	21-Mathematics

NGT 00-051-241 Rensselaer Polytechnic Institute 6185
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/06/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M E GLICKSMAN	LERC/F MONTEGANI	47-Materials Engr

NGT 00-070-272 Rensselaer Polytechnic Institute 6186
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
08/05/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H STEPHANON	GSFC/G SOFFEN	45-Elec Engr

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NGT 00-070-334 Rensselaer Polytechnic Institute 6187
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
07/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
B SZYMANSKI HQ/D K RUSSELL 22-Computer Science

NAG 3-1153 Rochester Institute of Technology 6195
COMPUTATIONAL AND EXPERIMENTAL INVESTIGATION OF SPAC E
TRANFER VEH ENG TURBOPUMP DESIGN FOR DEEP-THROT
Period *Obligations*
03/13/1990-07/27/1995 FY94: \$0 TOTAL: \$162,224
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A OGUT LERC/J A HEMMINGER 49-Engr, NEC
LERC/R J CAPALDI

NGT 00-090-131 Rensselaer Polytechnic Institute 6188
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
N BURNETT HQ/D K RUSSELL 99-Multi-Discip

NAG 8-1008 Rochester Institute of Technology 6196
JOVE
Period *Obligations*
11/24/1993-05/31/1995 FY94: \$59,000 TOTAL: \$59,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M L WINGSWORTH MSFC/F SIX 31-Atmos Sci
Z NINKOV

NGT 00-090-132 Rensselaer Polytechnic Institute 6189
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
N BURNETT HQ/D K RUSSELL 99-Multi-Discip

NAGW 4135 Rochester Institute of Technology 6197
CHARACTERIZATIONA DN DEVELOPMENT OF CHARGE INJECTI ON
DEVICE ARRAYS
Period *Obligations*
09/16/1994-06/30/1995 FY94: \$99,262 TOTAL: \$99,262
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
Z NINKEY HQ/T KOSTIUK 11-Astronomy

NGT 00-090-133 Rensselaer Polytechnic Institute 6190
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D TUTT HQ/D K RUSSELL 99-Multi-Discip

NAG 5-2336 Rockefeller University 6198
ANALYSIS OF OZONE LAYER DATA BASE
Period *Obligations*
07/28/1993-03/14/1994 FY94: \$59,446 TOTAL: \$100,660
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
L SIROVICH GSFC/P K BHARTIA 31-Atmos Sci

NGT 00-090-134 Rensselaer Polytechnic Institute 6191
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
N BURNETT HQ/D K RUSSELL 99-Multi-Discip

NAG 8-1002 Saint John Fisher College 6199
JOVE
Period *Obligations*
11/19/1993-05/31/1995 FY94: \$31,000 TOTAL: \$31,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
W LEWIS MSFC/F SIX 13-Physics
R SMITH

NGT 00-090-188 Rensselaer Polytechnic Institute 6192
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
N BURNETT HQ/D K RUSSELL 99-Multi-Discip

NAG 8-1033 Saint John Fisher College 6200
SEATTERING AND FLUORESCENCE STUDIES OF MASSIVE X-RAY
BINARIES
Period *Obligations*
02/11/1994-02/10/1995 FY94: \$10,000 TOTAL: \$10,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
W LEWIS MSFC/ 31-Atmos Sci

NGT 00-090-189 Rensselaer Polytechnic Institute 6193
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
N BURNETT HQ/D K RUSSELL 99-Multi-Discip

NAG 5-1397 State Univ of New York - Albany 6201
RESEARCH PROGRAM ON CLOUDS AND CLIMATE
Period *Obligations*
06/14/1990-07/14/1993 FY94: \$0 TOTAL: \$306,959
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
W C WANG GSFC/M D CHOU 31-Atmos Sci

NAG 1-1147 Rochester Institute of Technology 6194
HIGH POWER DIODE LASER MASTER OSCILLATOR-POWER AMP
LIFIER DEVICE PHYSICS AND POWER SCALING.
Period *Obligations*
05/21/1990-06/30/1993 FY94: \$1 TOTAL: \$175,918
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J R ANDREWS LARC/G L SCHUSTER 13-Physics
P MOUROULIS LARC/E J CONWAY

NAG 5-1501 State Univ of New York - Albany 6202
REPRESENTATION OF FRONTS IN GLOBAL ATMOSPHERIC MOD
ELS
Period *Obligations*
04/02/1991-04/14/1994 FY94: \$0 TOTAL: \$72,008
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D KEYSER GSFC/R M ATLAS 31-Atmos Sci

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 5-2205		State Univ of New York - Albany		6203
THE ROLE OF MOUNTAINS IN UNBALANCED FRONTOGENESIS				
<i>Period</i>		<i>Obligations</i>		
02/25/1993-02/28/1994	FY94: \$0	TOTAL: \$19,969		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
D J KNIGHT	GSFC/S E KOCH	31-Atmos Sci		

NAGW 3357		State Univ of New York - Albany		6211
PHYSICS AND CHEMISTRY OF NATURAL GLASSES				
<i>Period</i>		<i>Obligations</i>		
02/09/1993-01/31/1995	FY94: \$49,749	TOTAL: \$98,049		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J DELANO	HQ/H C BRINTON	32-Geological Sci		

NAG 5-2242		State Univ of New York - Albany		6204
SURFACE EXCHANGE OBSERVATIONS IN THE CANADIAN BORE AL FOREST REGION				
<i>Period</i>		<i>Obligations</i>		
04/08/1993-04/14/1995	FY94: \$216,500	TOTAL: \$386,500		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
D B FITZIARRALD	GSFC/F G HALL	39-Env Sci, NEC		
	GSFC/P SELLARS			

NAGW 3793		State Univ of New York - Albany		6212
GLOBAL RADON EMISSIONS INVENTORY WORKSHOP				
<i>Period</i>		<i>Obligations</i>		
10/13/1993-08/31/1994	FY94: \$7,006	TOTAL: \$7,006		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M KRITZ	HQ/J A KAYE	31-Atmos Sci		
	HQ/R E MURPHY			

NAG 5-2714		State Univ of New York - Albany		6205
REGIONAL - SCALE CHEMICAL IMPACTS OF AIRCRAFT EXHAUST				
<i>Period</i>		<i>Obligations</i>		
08/31/1994-08/31/1995	FY94: \$50,030	TOTAL: \$50,030		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
C W WALEK	GSFC/R W STEWART	31-Atmos Sci		

NAS 1-18155		State Univ of New York - Albany		6213
SCIENCE TEAM SUPPORT FOR ERBE				
<i>Period</i>		<i>Obligations</i>		
01/10/1986-09/30/1993	FY94: \$0	TOTAL: \$470,383		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
R D CESS	LARC/J L COOPER	31-Atmos Sci		

NAG 8-891		State Univ of New York - Albany		6206
SYNCHROTRON TOPOGRAPHY CHARACTERIZATION OF CRYSTAL USED IN ELECTRONIC ANDPHOTONIC APPLICATIONS				
<i>Period</i>		<i>Obligations</i>		
10/02/1991-10/01/1993	FY94: \$0	TOTAL: \$78,426		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M DUDLEY	MSFC/D C GILLIES	47-Materials Engr		
	MSFC/F R SZOFRAN			

NAS 1-18942		State Univ of New York - Albany		6214
SAGE III SCIENCE SUPPORT - P.I. - DR. V. MOHNEN				
<i>Period</i>		<i>Obligations</i>		
01/31/1990-01/31/1995	FY94: \$45,000	TOTAL: \$89,800		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
V MOHNEN	LARC/G L MADDREA	31-Atmos Sci		
	LARC/L R MCMASTER			

NAG 8-926		State Univ of New York - Albany		6207
HIGH BRIGHTNESS SOURCE DEVELOPMENT				
<i>Period</i>		<i>Obligations</i>		
07/10/1992-07/31/1994	FY94: \$0	TOTAL: \$29,300		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
W M GIBSON	MSFC/D C CARTER	11-Astronomy		

NAS 8-39926		State Univ of New York - Albany		6215
ADVANCE HIGH BRILLIANCE X-RAY SOURCE				
<i>Period</i>		<i>Obligations</i>		
04/01/1993-11/30/1994	FY94: \$148,975	TOTAL: \$248,975		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
W E GIBSON	MSFC/T Y MILLER	13-Physics		

NAG 9-78		State Univ of New York - Albany		6208
CHEMISTRIES OF LUNAR + TERRESTRIAL GLASS				
<i>Period</i>		<i>Obligations</i>		
02/01/1984-02/01/1994	FY94: \$0	TOTAL: \$340,630		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J W DELANO	JSC/I D BROWNE	32-Geological Sci		
D H LINDSLEY				

NAS 9-16042		State Univ of New York - Albany		6216
LIFE SCIENCE FLIGHT EXPERIMENT				
<i>Period</i>		<i>Obligations</i>		
01/17/1980-11/01/1994	FY94: \$255,000	TOTAL: \$3,176,020		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
L FARHI	JSC/C M BUNTIN	59-Life Sci, NEC		

NAGW 2978		State Univ of New York - Albany		6209
COMPARISON OF SAGE II AND IN SITU STRATOSPHERIC WA TER VAPOR PROFILES				
<i>Period</i>		<i>Obligations</i>		
03/16/1992-12/31/1993	FY94: \$0	TOTAL: \$55,529		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J SCHWAB	HQ/J C DODGE	32-Geological Sci		
	HQ/R A SCHIFFER			

NAGW 3155		State Univ of New York - Albany		6210
NAGW-3155/STATE UNIV NEW YORK/WORKSHOP ON GENERAL CIRCULATION MODEL STUDY: CLIMATE CHEMISTRY INTERAC				
<i>Period</i>		<i>Obligations</i>		
08/04/1992-07/31/1993	FY94: \$0	TOTAL: \$20,000		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
W C WANG	HQ/J A KAYE	31-Atmos Sci		
	HQ/R E MURPHY			

NCC 2-395		State Univ of New York - Albany		6217
DEVELOPMENT OF A HIGH ALTITUDE GAS SAMPLER AND AERCOLLECTOR FOR A TITAN PROBE GAS CHROMATOGRAPH				
<i>Period</i>		<i>Obligations</i>		
12/15/1985-12/14/1993	FY94:	TOTAL: \$294,535		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T W SCATTERGOOD	ARC/G C CARLE	59-Life Sci, NEC		

NCC 3-284		State Univ of New York - Albany		6218
CHEMICAL VAPOR DEPOSITION OA TITANIUM AND ITS ALLOYS FOR ADVANCED AEROSPACE AND MICROELETRONIC APPLICATI				
<i>Period</i>		<i>Obligations</i>		
12/18/1992-11/30/1995	FY94: \$51,677	TOTAL: \$101,625		
<i>Pnn. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
A E KOLOYEROS	LERC/A F HEPP	13-Physics		

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NGT 00-051-239 State Univ of New York - Albany 6219
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/19/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A E KALOYEROS LERC/F MONTEGANI 13-Physics

NAG 1-1099 State Univ of New York - Binghamton 6220
AERODYNAMIC GENERATION OF SOUND - FDP
Period *Obligations*
02/14/1990-10/08/1994 FY94: \$59,187 TOTAL: \$212,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J F GEER LARC/J C HARDIN 13-Physics

NAG 1-1406 State Univ of New York - Binghamton 6221
EXPERIMENTAL METHODS FOR ACOUSTIC FATIGUE RESEARCH
Period *Obligations*
03/04/1992-03/31/1995 FY94: \$50,715 TOTAL: \$155,216
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R N MILES LARC/S A RIZZI 41-Aero Engr
LARC/C A POWELL

NAG 3-1316 State Univ of New York - Binghamton 6222
STUDY OF THE PERFORMANCE OF A WORM GEARING TRANSMISSION ENHANCED BY HYDROSTATIC LUBRICATION
Period *Obligations*
01/13/1992-01/31/1995 FY94: \$21,787 TOTAL: \$84,425
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D C SUN LERC/D E BREWE 46-Mech Engr
Y QIN LERC/G A BOBULA

NAG 3-1464 State Univ of New York - Binghamton 6223
MODELING DEVELOPMENT - ASSESSMENT AND STRATEGY
Period *Obligations*
02/16/1993-02/13/1995 FY94: \$40,121 TOTAL: \$108,628
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D C HOPKINS LERC/R C CULL 45-Elec Engr

NAGW 2699 State Univ of New York - Binghamton 6224
THERMAL INFRARED REMOTE SENSING AND BIOSPHERIC PROCESSES
Period *Obligations*
08/20/1991-04/30/1994 FY94: \$0 TOTAL: \$190,093
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N S GOEL HQ/G ASRAR 39-Env Sci, NEC
J M NORMAN HQ/D E WICKLAND

NAGW 3003 State Univ of New York - Binghamton 6225
OCEAN TIDE MODELS FOR SATELLITE GEODESY AND EARTH ROTATION
Period *Obligations*
03/23/1992-06/30/1995 FY94: \$39,975 TOTAL: \$171,975
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S R DICKMAN HQ/R E MURPHY 32-Geological Sci
HQ/D M BUTLER

NGT 00-050-756 State Univ of New York - Binghamton 6226
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/21/1991-05/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G KLIR HQ/F C OWENS 21-Mathematics

NAG 1-1122 State Univ of New York - Buffalo 6227
LARGE EDDY SIMULATORS AND DIRECT NUMERICAL SIMULATORS OF HIGH SPEED TURBULANT REACTING FLOWS
Period *Obligations*
04/19/1990-07/31/1995 FY94: \$51,000 TOTAL: \$296,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P GIBI LARC/J P DRUMMOND 46-Mech Engr

NAG 1-1342 State Univ of New York - Buffalo 6228
METHODS AND PRINCIPLES FOR DETERMINING TASK DEPENDENT INTERFACE CONTENT
Period *Obligations*
09/20/1991-06/30/1995 FY94: \$129,931 TOTAL: \$336,760
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V L SHALIN LARC/K H ABBOTT 69-Psych, NEC
LARC/P C SCHUTTE

NAG 1-1599 State Univ of New York - Buffalo 6229
OPTIMAL SCHEDULE FOR REDUCTION OF COMPLEX SYSTEMS MY 1/2
Period *Obligations*
03/02/1994-03/01/1995 FY94: \$41,540 TOTAL: \$41,540
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C L BLEEBAUM LARC/J L ROGERS 49-Engr, NEC

NAG 3-862 State Univ of New York - Buffalo 6230
STATISTICAL FRACTURE ANALYSIS OF COMPOSITE MATERIALS
Period *Obligations*
01/22/1988-10/31/1994 FY94: \$0 TOTAL: \$341,149
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C WETHERHOLD LERC/B GROSS 47-Materials Engr

NAG 3-962 State Univ of New York - Buffalo 6231
CLOSURE FORMULATION SYSTEM FOR TURBOMACHINERY
Period *Obligations*
12/12/1988-11/30/1993 FY94: \$0 TOTAL: \$92,610
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D B TAULBEE LERC/J J ADAMCZYK 41-Aero Engr

NAG 3-1345 State Univ of New York - Buffalo 6232
WIRING INSULATION FOR SPACE POWER APPLICATIONS
Period *Obligations*
04/16/1992-04/10/1995 FY94: \$69,996 TOTAL: \$155,048
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R LAGHARI LERC/S DOMITZ 45-Elec Engr
LERC/J DICKMAN

NAG 3-1548 State Univ of New York - Buffalo 6233
ATM IN A LOCAL ENVIRONMENT: AN EVALUATION OF ATM T O SUPPORT HETEROGENEOUS COMPUTING
Period *Obligations*
12/01/1993-11/30/1994 FY94: \$39,689 TOTAL: \$39,689
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P W DOWD LERC/R W CLAUS 22-Computer Science

NAG 3-1620 State Univ of New York - Buffalo 6234
NONLINEAR BUBBLE INTERACTIONS IN ACOUSTIC PRESSURE FIELDS
Period *Obligations*
06/16/1994-06/15/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J TSAMOPOULOS LERC/B S SINGH 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 5-1627 State Univ of New York - Buffalo 6235
ANALYSIS OF FIFE SURFACE RADIANCE DATA FOR INTEFER ENCE
OF BIOLOGICAL PROCESSES
Period *Obligations*
06/12/1991-06/14/1993 FY94: \$0 TOTAL: \$65,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N GOEL GSFC/F G HALL 39-Env Sci, NEC

NAG 5-2181 State Univ of New York - Buffalo 6236
A MINIMUM MODEL ERROR APPROACH TO ATTITUDE DETERMI
NATION
Period *Obligations*
01/14/1993-01/14/1995 FY94: \$47,426 TOTAL: \$93,344
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J MOOK GSFC/T H STENGLE 42-Astro Engr
GSFC/K GALAL

NAG 5-2273 State Univ of New York - Buffalo 6237
VOLCANO MONITORING FOR ERUPTION PREDICTION AND FOR
ECASTING USING THE GLOBAL POSITIONING SYSTEM
Period *Obligations*
05/26/1993-05/31/1995 FY94: \$20,000 TOTAL: \$45,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
BURSIK GSFC/G BILLS 32-Geological Sci

NAG 9-762 State Univ of New York - Buffalo 6238
CHARACTERIZATION OF MICROGRAVITY EFFECTS ON BONE
STRUCTURE AND STRENGTH USING FRACTAL ANALYSIS
Period *Obligations*
09/26/1994-08/31/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L C SHACKELFORD JSC/N G ROBERTSON 51-Biological Sci

NAGW 966 State Univ of New York - Buffalo 6239
PARTICIPATION IN THE HYPERSONIC TRAINING/RESEARCH
PROGRAM
Period *Obligations*
06/01/1986-10/31/1992 FY94: \$0 TOTAL: \$1,087,573
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W GEORGE HQ/S M WANDER 13-Physics
W J RAE HQ/R A GRAVES
M S HOLDEN

NAGW 3630 State Univ of New York - Buffalo 6240
GRAVITY INDUCED ALTERATION IN DIFFERENTIATION OF A LL TYPE
IN CHARA
Period *Obligations*
05/28/1993-05/31/1995 FY94: \$64,000 TOTAL: \$119,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A BISSON HQ/T W HALSTEAD 51-Biological Sci

NAGW 3937 State Univ of New York - Buffalo 6241
CARDIOPULMONARY HEMODYNAMICS IN MICROGRAVITY
Period *Obligations*
05/27/1994-05/31/1995 FY94: \$219,404 TOTAL: \$219,404
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L E FARHI HQ/F M SULZMAN 51-Biological Sci

NAG10-99 State Univ of New York - Buffalo 6242
GRAVITY INDUCED ALTERATION IN DIFFERENTIATION OF CELL TYPE
IN CHARA
Period *Obligations*
02/19/1992-09/25/1993 FY94: TOTAL: \$54,646
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A BISSON KSC/W M KNOTT 51-Biological Sci
M J HOLLINGSWORTH

NGT 00-010-019 State Univ of New York - Buffalo 6243
NGT-10019/RESEARCH FOUNDATION STATE UNIV NY/MULTID
ISCIPLINARY DESIGN/ANALYSIS FELLOWSHIP PROGRAM
Period *Obligations*
12/06/1993-03/31/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C L BLOEBAUM HQ/G S SEIDEL 41-Aero Engr
A SOOM HQ/J R FACEY

NGT 00-050-992 State Univ of New York - Buffalo 6244
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/04/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V SHALIN LARC/E J PRIOR 49-Engr, NEC

NGT 00-070-333 State Univ of New York - Buffalo 6245
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/29/1993-06/30/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J MOOK HQ/D K RUSSELL 46-Mech Engr

NAG 1-1264 State Univ of New York - Stony Brook 6246
THE SURFACE RADIATION BUDGET AND CLOUD CLIMATE
INTERACTIONS AS A PART OF CERES
Period *Obligations*
04/29/1991-04/30/1995 FY94: \$128,045 TOTAL: \$327,045
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R D CESS LARC/B A WIELICKI 31-Atmos Sci
LARC/J W YOUNGBLOOD

NAG 1-1354 State Univ of New York - Stony Brook 6247
GROUND-BASED MEASUREMENT OF STRATOSPHERIC C10, H2O N2O
AND O3 IN SUPPORT OF THE UARS MISSION
Period *Obligations*
12/19/1991-12/31/1994 FY94: \$77,963 TOTAL: \$325,895
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R DE ZAFRA LARC/J G WELLS 31-Atmos Sci

NAG 3-1526 State Univ of New York - Stony Brook 6248
DEVELOPMENT OF A FIBER OPTIC COMPRESSOR BLADE SENS OR
Period *Obligations*
09/08/1993-09/07/1994 FY94: \$16,000 TOTAL: \$54,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H S DHADWALL LERC/A KURKOV 49-Engr, NEC
LERC/O MEHMED

NAG 5-1231 State Univ of New York - Stony Brook 6249
INFRARED EMISSION MOLECULAR CLOUDS NEAR ZETA
Period *Obligations*
07/27/1989-08/31/1993 FY94: \$0 TOTAL: \$85,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M SOLOMON GSFC/D WEST 11-Astronomy

NAG 5-1594 State Univ of New York - Stony Brook 6250
GLOBAL ASPECTS OF LOW MASS STAR FORMATION IN THE O
RION COMPLEX AND LOW MASS STARS IN ASSOCIATION I. .
Period *Obligations*
05/09/1991-11/30/1995 FY94: \$78,400 TOTAL: \$158,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F M WALTER GSFC/R PETRE 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 5-1663 State Univ of New York - Stony Brook 6251
THE DIRTY B STARS OF TAURUS-AURIZA AND INFRARED ANALYSIS
OF RADIO SELECTED ULTRACOMPACT HII REGIONS
Period *Obligations*
06/24/1991-06/30/1993 FY94: \$0 TOTAL: \$59,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F M WALTER GSFC/D WEST 11-Astronomy

NAG 5-2404 State Univ of New York - Stony Brook 6259
HIGH MASS STAR FORMATION AND ULTRACOMPACT HII REGIONS
IN GALACTIC PLANE GMC'S
Period *Obligations*
10/28/1993-10/31/1994 FY94: \$45,200 TOTAL: \$45,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M SOLOMON GSFC/D WEST 11-Astronomy

NAG 5-1699 State Univ of New York - Stony Brook 6252
DEVELOPMENT AND EVALUATION OF 4-D DATA ASSIMILATION
FOR TRMM SCIENCE
Period *Obligations*
08/15/1991-08/14/1994 FY94: \$0 TOTAL: \$155,511
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A GELLER GSFC/W TAO 31-Atmos Sci

NAG 5-2507 State Univ of New York - Stony Brook 6260
LATE B STAR X-RAY SOURCES
Period *Obligations*
02/03/1994-02/14/1995 FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F WALTER GSFC/D WEST 11-Astronomy

NAG 5-1862 State Univ of New York - Stony Brook 6253
THREE DIMENSIONAL STRUCTURES OF THE ATMOSPHERES OF
COOL STARS
Period *Obligations*
01/16/1992-11/30/1994 FY94: \$78,002 TOTAL: \$222,645
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F M WALTER GSFC/A SMITH 11-Astronomy

NAG 8-844 State Univ of New York - Stony Brook 6261
X-RAY ANALYSIS OF X-RAY DISCOVERED LOW PRE-MAIN SEQUENCE
STARS
Period *Obligations*
08/24/1990-09/30/1992 FY94: TOTAL: \$129,902
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F WALTER MSFC/D HAVRISIK 31-Atmos Sci

NAG 5-1874 State Univ of New York - Stony Brook 6254
ATMOSPHERIC STRUCTURES IN NAKED T TAURI STARS
Period *Obligations*
01/23/1992-01/31/1994 FY94: \$0 TOTAL: \$67,672
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F M WALTER GSFC/R PETRE 11-Astronomy

NAGW 665 State Univ of New York - Stony Brook 6262
CHEM OF VIBRATIONALLY/ELECT EXCITED SPECIES IN
PLANETARY
Period *Obligations*
11/01/1984-12/31/1992 FY94: TOTAL: \$197,687
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J FOX HQ/J BERGSTRALH 11-Astronomy
HQ/W L QUAIDE

NAG 5-1962 State Univ of New York - Stony Brook 6255
FIFTH EPOCH DOPPLER IMAGING OBSERVATIONS OF AR
LACERTAE
Period *Obligations*
04/03/1992-04/14/1993 FY94: TOTAL: \$16,974
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F M WALTER GSFC/D WEST 11-Astronomy

NAGW 1107 State Univ of New York - Stony Brook 6263
DYNAMICAL PROBLEMS IN THE SOLAR SYSTEM
Period *Obligations*
06/01/1987-12/31/1994 FY94: \$60,000 TOTAL: \$358,850
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LISSAUER HQ/J R UNDERWOOD 32-Geological Sci
HQ/J M BOYCE

NAG 5-2002 State Univ of New York - Stony Brook 6256
INFRARED ANALYSIS OF RADIO SELECTED ULTRACOMPACT H II
REGIONS IN GALACTIC PLANE G
Period *Obligations*
07/01/1992-06/30/1993 FY94: \$0 TOTAL: \$36,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M SOLOMON GSFC/D WEST 11-Astronomy

NAGW 1238 State Univ of New York - Stony Brook 6264
LABORATORY SPECTROSCOPIC MEASUREMENTS
Period *Obligations*
12/07/1987-12/31/1994 FY94: \$79,394 TOTAL: \$543,526
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P VARANASI HQ/M J KURYLO 39-Env Sci, NEC
HQ/R T WATSON

NAG 5-2366 State Univ of New York - Stony Brook 6257
THE EMISSION MEASURE DISTRIBUTION IN THE CORONAE OF AR
LACERTAE
Period *Obligations*
09/13/1993-09/24/1995 FY94: \$79,739 TOTAL: \$79,739
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F M WALTER GSFC/R OLIVERSEN 11-Astronomy

NAGW 1529 State Univ of New York - Stony Brook 6265
CELLS EMBRYOS AND DEVELOPMENT IN SPACE
Period *Obligations*
11/28/1988-10/31/1994 FY94: \$80,000 TOTAL: \$525,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A D KRIKORIAN HQ/T HALSTEAD 59-Life Sci, NEC

NAG 5-2403 State Univ of New York - Stony Brook 6258
REDETERMINATION OF FLUXES FOR IRAS GALAXIES
Period *Obligations*
10/25/1993-10/31/1994 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A YAHIL GSFC/D WEST 11-Astronomy

NAGW 1560 State Univ of New York - Stony Brook 6266
TESTING AND OPERATION OF A MILLIMETER WAVE CIO RECEIVES
Period *Obligations*
04/26/1989-08/15/1994 FY94: \$126,349 TOTAL: \$1,106,012
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P M SOLOMON HQ/M J KURYLO 31-Atmos Sci
HQ/R T WATSON

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAGW 1894 State Univ of New York - Stony Brook 6267
QUANTITATIVE SPECTROSCOPIC MEASUREMENTS ON THE PRINCIPAL CONSTITUENTS IN PLANETARY ATMOSPHERES

Period	Obligations	
01/24/1990-09/30/1994	FY94: \$72,818	TOTAL: \$330,131
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P VARANASI	HQ/J T BERGSTRALH	11-Astronomy

NAGW 2182 State Univ of New York - Stony Brook 6268
NAGW-2182/STATE UNIV NY/THE MEASUREMENT OF STRATOSPHERIC TRACE GASES BY MM-WAVE EMISSION SPECTROSCOPY

Period	Obligations	
07/09/1990-12/31/1994	FY94: \$186,844	TOTAL: \$947,244
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R DE ZAFRA	HQ/M J KURYLO	31-Atmos Sci

NAGW 2238 State Univ of New York - Stony Brook 6269
NAGW-2238/STATE UNIV NY/EXOSPHERIC PROCESSES AND ESCAPE OF SPECIES FROM THE MARTIAN ATMOSPHERE

Period	Obligations	
03/06/1991-03/31/1995	FY94: \$0	TOTAL: \$116,572
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L FOX	HQ/J M BOYCE	32-Geological Sci

NAGW 2334 State Univ of New York - Stony Brook 6270
NAGW-2334/STATE UNIV NY/STONY BROOK/INTERSTELLAR AND SOLAR SYSTEM CHEMISTRY

Period	Obligations	
06/13/1991-10/31/1994	FY94: \$17,441	TOTAL: \$127,177
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R F KNACKE	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 2483 State Univ of New York - Stony Brook 6271
ANALYSIS OF EUV DAYGLOWS SPECTRA OF TRITON, TITAN, AND EARTH

Period	Obligations	
07/10/1991-03/31/1994	FY94: \$0	TOTAL: \$73,071
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L FOX	HQ/W L QUAIDE	19-Phys Sci, NEC

NAGW 2796 State Univ of New York - Stony Brook 6272
INFRARED SPECTROSCOPY OF JUPITER AND SATURN

Period	Obligations	
12/18/1991-09/30/1993	FY94: \$0	TOTAL: \$80,135
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R KNACKE	HQ/W L QUAIDE	11-Astronomy

NAGW 2958 State Univ of New York - Stony Brook 6273
STUDIES OF EXCITED SPECIES IN PLANETARY UPPER ATMOSPHERE

Period	Obligations	
03/03/1992-12/31/1994	FY94: \$81,055	TOTAL: \$236,549
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L FOX	HQ/W L QUAIDE	11-Astronomy

NAGW 3165 State Univ of New York - Stony Brook 6274
TIMESCALES FOR THE DISSIPATION OF PROTOPLANETARY DISKS

Period	Obligations	
08/10/1992-05/31/1995	FY94: \$35,000	TOTAL: \$105,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F WALTER	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 3206 State Univ of New York - Stony Brook 6275
NAGW-3206/STATE UNIV NEW YORK/STONY BROOK/OPEN MIND CONFERENCE

Period	Obligations	
09/23/1992-03/14/1994	FY94: \$0	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M ADAMS	HQ/B WHITE	99-Multi-Discip

NAGW 3517 State Univ of New York - Stony Brook 6276
CONTINUED PARTICIPATION ON THE RECONSTITUTED EARTH RADIATION BUDGET EXPERIMENT SCIENCE TEAM

Period	Obligations	
04/30/1993-03/31/1994	FY94: \$0	TOTAL: \$84,245
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R D CESS	HQ/J C DODGE	31-Atmos Sci
	HQ/R A SCHIFFER	

NAGW 3731 State Univ of New York - Stony Brook 6277
STUDIES OF THE NIGHTSIDE IONOSPHERES-THERMOSPHERES OF VENUS AND MARS

Period	Obligations	
09/03/1993-06/30/1995	FY94: \$32,400	TOTAL: \$77,400
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L FOX	HQ/J T BERGSTRALH	32-Geological Sci

NAGW 4040 State Univ of New York - Stony Brook 6278
THE STABILITY OF ORBITAL CONFIGURATIONS: THE ULTIMATE CONFIGURATION OF PLANETARY AND SATELLITE SYSTEM

Period	Obligations	
06/09/1994-03/31/1995	FY94: \$45,000	TOTAL: \$45,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J LISSAUER	HQ/P ROGERS	11-Astronomy

NAGW 4113 State Univ of New York - Stony Brook 6279
STUDY OF ENVIRONMENTS FOR PLANET FORMATION

Period	Obligations	
09/06/1994-07/31/1995	FY94: \$14,997	TOTAL: \$14,997
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M SIMON	HQ/P ROGERS	11-Astronomy

NAGW-70 State Univ of New York - Stony Brook 6280
CHROMOSOMES/PLANT CELL DIVISION IN SPACE CHROMEX-2

Period	Obligations	
03/26/1990-11/25/1994	FY94: \$0	TOTAL: \$658,968
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A D KRIKORIAN	KSC/W M KNOT	51-Biological Sci

NAGW-146 State Univ of New York - Stony Brook 6281
PLANT EMBRYOS AND FIDELITY OF CELL DIVISION

Period	Obligations	
09/30/1994-09/30/1995	FY94: \$94,002	TOTAL: \$94,002
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A D KRIKORIAN	KSC/W M KNOTT	55-Agriculture Sci

NAS 5-31247 State Univ of New York - Stony Brook 6282
OBSERVATION ANALYSIS/THEORETICAL MODELING INVEST. UARS

Period	Obligations	
08/09/1990-09/30/1995	FY94: \$320,000	TOTAL: \$1,466,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M A GELLER	GSFC/C A REBER	31-Atmos Sci

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAS 5-31720 State Univ of New York - Stony Brook 6283
EOS INVESTIGATION GLOBAL HYDROLOGIC PROCESSES AND CLIMATE
Period *Obligations*
08/21/1991-08/21/1996 FY94: \$45,000 TOTAL: \$154,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M GELLER GSFC/W LAU 39-Env Sci, NEC

NCC 3-241 State Univ of New York - Stony Brook 6284
FIBER OPTIC PROBES FOR LASER LIGHT SCATTERING: GROUND BASED EVALUATION FOR MICROGRAVITY FLIGHT EXPER
Period *Obligations*
12/02/1991-11/30/1993 FY94: TOTAL: \$82,670
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H S DHADWAL LERC/T K GLASGOW 47-Materials Engr

NCC 8-48 State Univ of New York - Stony Brook 6285
CRYSTAL RESEARCH
Period *Obligations*
06/17/1994-06/16/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M DUDLEY MSFC/D C GILLIES 13-Physics
D J LARSON MSFC/F R SZOFRAN

NCC 8-53 State Univ of New York - Stony Brook 6286
CRYSTAL STUDIES
Period *Obligations*
07/15/1994-07/14/1995 FY94: \$13,000 TOTAL: \$13,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M DUDLEY MSFC/D C GILLIES 13-Physics
MSFC/F R SZOFRAN

NGT 00-030-121 State Univ of New York - Stony Brook 6287
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/21/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A SUBRAMANIAM HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-030-146 State Univ of New York - Stony Brook 6288
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
10/21/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A M WALLACE HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NAG 9-459 State Univ of New York Col - Plattsburgh 6289
TRACE ELEMENT ABUNDANCE MEASUREMENTS ON COSMIC DUST PARTICLES
Period *Obligations*
07/01/1990-07/01/1994 FY94: \$0 TOTAL: \$95,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J FLYNN JSC/I D BROWNE 19-Phys Sci, NEC

NAGW 3587 State Univ of New York Col - Plattsburgh 6290
TRACE ELEMENT ABUNDANCE MEASUREMENTS ON COSMIC DUST PARTICLES
Period *Obligations*
05/12/1993-06/30/1995 FY94: \$34,248 TOTAL: \$70,298
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G FLYNN HQ/J BOYCE 32-Geological Sci

NAG 5-2700 State Univ of New York College - Purchase 6291
IMPROVEMENT OF JET STREAM WIND ANALYSIS USING COMMERCIAL AIRCRAFT DATA
Period *Obligations*
08/24/1994-08/31/1995 FY94: \$9,727 TOTAL: \$9,727
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J TENENBAUM GSFC/R W STEWART 31-Atmos Sci

NSG-5077 State Univ of New York College - Purchase 6292
SPECTRAL AND MONTE CARLO PREDICTABILITY STUDIES
Period *Obligations*
09/01/1975-05/31/1994 FY94: \$60,000 TOTAL: \$660,745
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J TENENBAUM GSFC/M HELFAND 31-Atmos Sci
M REDDI

NAGW 2259 State Univ of New York College, Buffalo 6293
COMPARATIVE VOLCANOLOGIC STUDIES AND PPG UNDERGRADUATE RESEARCH PROGRAM
Period *Obligations*
12/14/1990-12/31/1994 FY94: \$94,530 TOTAL: \$408,787
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J S KING HQ/T A MAXWELL 32-Geological Sci

NGT 00-070-142 State Univ of New York College, Buffalo 6294
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
09/22/1989-12/31/1993 FY94: \$0 TOTAL: \$84,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J MOOK HQ/F C OWENS 13-Physics

NAG 1-759 Syracuse University 6295
COMPREHENSIVE ANALYSIS OF HELICOPTERS WITH BEARING LESS ROTORS
Period *Obligations*
05/20/1987-06/30/1993 FY94: TOTAL: \$115,506
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V R MURTHY LARC/W T YEAGER 41-Aero Engr

NAG 1-1400 Syracuse University 6296
TURBULANCE MEASUREMENTS IN HYPERSONIC BOUNDARY LAYERS USING CONSTANT
Period *Obligations*
02/24/1992-12/31/1994 FY94: \$1 TOTAL: \$118,405
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E F SPINA LARC/S K ROBINSON 19-Phys Sci, NEC

NAG 1-1401 Syracuse University 6297
SPECIFICATIONS FOR IMPROVED RELIABILITY AND TESTING: AN EXPERIMENTAL STUDY BASED ON GCS
Period *Obligations*
02/25/1992-11/22/1993 FY94: \$1 TOTAL: \$23,409
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A L GOEL LARC/G B FINELLI 29-Math/Computer, NEC
S K CHIN LARC/K J HAYHURST

NAG 2-821 Syracuse University 6298
PLANNING FOR INDUSTRY INTERACTION IN HIGH PERFORMANCE COMPUTING FOR MULTIDISCIPLINARY DESIGN IN...
Period *Obligations*
12/16/1992-11/14/1993 FY94: \$0 TOTAL: \$117,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G C FOX ARC/K G STEVENS 22-Computer Science
E A BOGUCZ

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAG 3-621 Syracuse University 6299
UNSTEADY TRANSIONIC HEAT TRANSFER IN A TRANSIENT FACILITY
Period Obligations
03/07/1985-05/31/1994 FY94: \$0 TOTAL: \$228,735
Prin. Invest. NASA Tech. Officer CASE Category
J E LEGRAFF LERC/J E O'BRIEN 46-Mech Engr
LERC/R J SIMONEAU

NAG 3-1468 Syracuse University 6300
THREE-DIMENSIONAL AND VISCOUS INVERSE DESIGN METHOD FOR BLADES IN MULTISTAGE TURBOMACHINES
Period Obligations
04/16/1993-03/31/1995 FY94: \$38,967 TOTAL: \$74,936
Prin. Invest. NASA Tech. Officer CASE Category
T Q DANG LERC/J P VERES 41-Aero Engr

NAG 3-1585 Syracuse University 6301
INVERSE METHOD FOR THE NASA LERC TURBOMACHINERY DESIGN/ANALYSIS SYSTEM
Period Obligations
03/29/1994-12/28/1994 FY94: \$22,223 TOTAL: \$22,223
Prin. Invest. NASA Tech. Officer CASE Category
T Q DANG LERC/D P MILLER 41-Aero Engr

NAG 3-1630 Syracuse University 6302
EFFECTS OF GRAVITY AND SHEAR ON THE DYNAMICS AND STABILITY OF PARTICULATE AND MULTIPHASE FLOW
Period Obligations
06/24/1994-06/23/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
A S SANGANI LERC/H K NAHRA 43-Chem Engr

NAG 5-2280 Syracuse University 6303
HIGH PERFORMANCE COMPUTING AND FOUR-DIMENSIONAL DATA ASSIMILATION
Period Obligations
05/26/1993-06/30/1994 FY94: \$140,000 TOTAL: \$210,000
Prin. Invest. NASA Tech. Officer CASE Category
G C FOX GSFC/R B ROOD 31-Atmos Sci
K MILLS

NAGW 2932 Syracuse University 6304
HYDROGEN RECOMBINATION ON SURFACES OF INTERSTELLAR GRAIN ANALOGUES: A LABORATORY INVESTIGATION
Period Obligations
02/28/1992-11/30/1994 FY94: \$87,000 TOTAL: \$248,092
Prin. Invest. NASA Tech. Officer CASE Category
G VIDALI HQ/L CAROFF 13-Physics

NAGW 3256 Syracuse University 6305
WORKSHOPS FOR ELEMENTARY SCHOOL TEACHERS
Period Obligations
11/16/1992-07/31/1993 FY94: \$0 TOTAL: \$4,925
Prin. Invest. NASA Tech. Officer CASE Category
P G VIDALI HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 3713 Syracuse University 6306
CENTER FOR TRAINING AND RESEARCH IN HYPERSONICS
Period Obligations
08/12/1993-07/31/1995 FY94: \$150,880 TOTAL: \$200,880
Prin. Invest. NASA Tech. Officer CASE Category
E F SPINA HQ/S WANDER 49-Engr, NEC

NGT 00-030-124 Syracuse University 6307
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/30/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
B J WILSEY HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-051-171 Syracuse University 6308
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/14/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
E F SPINA LARC/E J PRIOR 46-Mech Engr

NGT 00-070-380 Syracuse University 6309
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
09/02/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
T DENG HQ/D K RUSSELL 49-Engr, NEC

NAG 2-117 University of Rochester 6310
DEVELOPMENT OF AN INFRARED CCD FOR USE IN ASTRONOMY
Period Obligations
10/01/1987-12/31/1994 FY94: \$55,000 TOTAL: \$804,764
Prin. Invest. NASA Tech. Officer CASE Category
W J FORREST ARC/J H GOEBEL 11-Astronomy
J L PIPHER ARC/C R MCCREIGHT
S D GALEMA

NAGW 2123 University of Rochester 6311
SUNSPOT DYNAMICS
Period Obligations
06/06/1990-03/31/1995 FY94: \$77,600 TOTAL: \$318,400
Prin. Invest. NASA Tech. Officer CASE Category
J H THOMAS HQ/J D BOHLIN 13-Physics
HQ/S KANE

NAGW 2262 University of Rochester 6312
DEVELOPMENT AND EVOLUTION OF THERMAL STRUCTURE IN SUBSTELLAR OBJECTS
Period Obligations
01/28/1991-10/01/1995 FY94: \$0 TOTAL: \$25,100
Prin. Invest. NASA Tech. Officer CASE Category
H M VAN HORN HQ/J A NUTH 19-Phys Sci, NEC

NAGW 2356 University of Rochester 6313
CENTER FOR SPACE ENVIRONMENTAL HEALTH (CSEH)
Period Obligations
01/30/1991-12/31/1994 FY94: \$999,000 TOTAL: \$3,904,000
Prin. Invest. NASA Tech. Officer CASE Category
T W CLARKSON HQ/R J WHITE 59-Life Sci, NEC

NAGW 2393 University of Rochester 6314
ALTERNATE DETECTOR TECHNOLOGIES FOR SIRT
Period Obligations
04/17/1991-03/31/1995 FY94: \$105,000 TOTAL: \$630,654
Prin. Invest. NASA Tech. Officer CASE Category
J L PIPHER HQ/M BICAY 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
NEW YORK (Continued)**

NAGW 2444 University of Rochester 6315
NAGW-2444/UNIV ROCHESTER/SEISMOLOGY OF ROTATING,
MAGNETIC STARS
Period Obligations
07/01/1991-01/31/1995 FY94: \$79,000 TOTAL: \$604,000
Prin. Invest. NASA Tech. Officer CASE Category
J H THOMAS HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2514 University of Rochester 6316
NAGW-2514/UNIV ROCHESTER/SUBMILLIMETER SIS RECEIVE R
SCIENCE
Period Obligations
05/10/1991-05/31/1994 FY94: \$0 TOTAL: \$156,000
Prin. Invest. NASA Tech. Officer CASE Category
M J WENGLER HQ/M D BICAY 45-Elec Engr

NCA 2-618 University of Rochester 6317
INFLUENCES OF FIXATION AND GRAVITY ON THE LINEAR
VESTIBULOCULAR REFLEX.
Period Obligations
06/07/1991-04/30/1995 FY94: \$0 TOTAL: \$79,818
Prin. Invest. NASA Tech. Officer CASE Category
G D PAIGE ARC/D L TOMKO 56-Medical Sciences

NCA 2-827 University of Rochester 6318
COMPUTATIONAL MODELING OF ULTRAFast OPTICLA PHENOM ENA
IN SEMICONDUCTOR LASERS AND AMPLIFIERS
Period Obligations
06/29/1993-08/31/1995 FY94: \$0 TOTAL: \$25,000
Prin. Invest. NASA Tech. Officer CASE Category
G AGRAWL ARC/P GOORJIAN 45-Elec Engr

NGT 00-050-817 University of Rochester 6319
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1991-06/30/1994 FY94: \$0 TOTAL: \$61,484
Prin. Invest. NASA Tech. Officer CASE Category
J PIPHER HQ/J T LYNCH 11-Astronomy

NGT 00-050-888 University of Rochester 6320
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/01/1992-06/30/1995 FY94: \$20,000 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
D M WATSON JPL/H ASHKENAS 13-Physics

NGT 00-051-109 University of Rochester 6321
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/29/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
G W WICKS LARC/E PRIOR 45-Elec Engr

NAGW 3822 Vassar College 6322
NAGW-3822/VASSAR COLLEGE/EFFECT OF GLACIAL AND POL AR
ICE
Period Obligations
12/01/1993-12/31/1994 FY94: \$55,091 TOTAL: \$55,091
Prin. Invest. NASA Tech. Officer CASE Category
A S TRUPIN HQ/BALTUCK 32-Geological Sci
HQ/F CHAO

NAG 9-573 Yeshiva University 6323
AUTOMATED MICROBIOLOGY SYSTEM DIAGNOSTIC CARDS FOR
DETECTION/ISOLATION OF COMMON MICRO-ORGANISMS
Period Obligations
03/08/1992-04/01/1994 FY94: \$0 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
H D ISENBERT JSC/D L PIERSON 56-Medical Sciences

NORTH CAROLINA

NAG 1-1321 Appalachian State University 6324
A HYPERTEXT BASED PILOT OPERATIONS AND PROCEDURES
MANUAL
Period Obligations
08/13/1991-04/30/1995 FY94: \$35,630 TOTAL: \$137,260
Prin. Invest. NASA Tech. Officer CASE Category
C R RUSSELL LARC/T S ABBOTT 22-Computer Science
LARC/M T PALMER

NAG 1-1569 Duke University 6325
EXPERIMENTAL AND THEORETICAL AEROELASTIC STUDY OF A
WING AND CONTROL-SURFACE WITH FREE PLAY
Period Obligations
02/02/1994-01/31/1995 FY94: \$25,033 TOTAL: \$25,033
Prin. Invest. NASA Tech. Officer CASE Category
E H DOWELL LARC/S R COLE 41-Aero Engr

NAG 1-1570 Duke University 6326
ACTIVE STRUCTURAL ACOUSTIC CONTROL OF PERSISTENT,
IMPULSIVE AND BROADBAND DISTURBANCES
Period Obligations
01/14/1994-01/13/1995 FY94: \$72,958 TOTAL: \$72,958
Prin. Invest. NASA Tech. Officer CASE Category
R L CLARK LARC/R J SILCOX 41-Aero Engr
LARC/K P SHEPHERD

NAG 1-1592 Duke University 6327
ESTIMATION OF CARBON-BASED GREENHOUSE GAS EMISSIONS
FROM FIRES IN BOREAL FORESTS
Period Obligations
01/21/1994-01/20/1995 FY94: \$22,017 TOTAL: \$22,017
Prin. Invest. NASA Tech. Officer CASE Category
E S KASISCHKE LARC/D R CAHOON 39-Env Sci, NEC

NAG 3-1433 Duke University 6328
AEROACOUSTIC SENSITIVITY ANALYSIS AND OPTIMAL AEROAC
OUSTIC DESIGN OF TURBOMACHINERY BLADES
Period Obligations
01/15/1993-01/26/1995 FY94: \$55,161 TOTAL: \$107,318
Prin. Invest. NASA Tech. Officer CASE Category
K HALL LERC/D HOYNIK 41-Aero Engr
LERC/D L HUFF

NAG 5-379 Duke University 6329
CRITICAL TRANSPORT PHENOMENA IN FLUID HELIUM UNDER LOW
GRAVITY
Period Obligations
11/15/1983-01/31/1993 FY94: TOTAL: \$770,264
Prin. Invest. NASA Tech. Officer CASE Category
H MEYER GSFC/S H CASTLES 13-Physics
R P BEHRINGER GSFC/M G RYSCHKEWITSCH

**NASA'S UNIVERSITY PROGRAM
NORTH CAROLINA (Continued)**

NAG 8-966	Duke University	6330	CRYSTALLIZATION OF SOLUTION PROPERTIES OF REDESIGN ED PROTEIN SUFACES
<i>Period</i>	<i>Obligations</i>		
08/10/1993-06/30/1995	FY94: \$73,463	TOTAL: \$145,405	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D C RICHARDSON	MSFC/D CARTER	19-Phys Sci, NEC	
NAG 8-982	Duke University	6331	NON-LINEAR OPTICAL SYSTEMS SUPPORT
<i>Period</i>	<i>Obligations</i>		
09/16/1993-09/19/1994	FY94: \$0	TOTAL: \$75,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J M MADEY	MSFC/E E MONTGOMERY	13-Physics	
NAG 9-134	Duke University	6332	NITROGEN ELIMINATION/MODIFYING FACTORS
<i>Period</i>	<i>Obligations</i>		
03/01/1986-10/01/1994	FY94: \$52,498	TOTAL: \$776,928	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R D VANN	JSC/M R POWELL	56-Medical Sciences	
NAGW 2692	Duke University	6333	MONITORING TRENDS IN FIRE-DISTURBED BLACK SPRUCE F ORESTS
<i>Period</i>	<i>Obligations</i>		
08/09/1991-03/31/1994	FY94: \$0	TOTAL: \$126,376	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
N L CHRISTENSEN	HQ/R H THOMAS	39-Env Sci, NEC	
	HQ/D M BUTLER		
NAGW 3328	Duke University	6334	EQUILIBRATION IN DENSITY AND TEMPERATURE NEAR THE LIQUID VAPOR CRITICAL POINT
<i>Period</i>	<i>Obligations</i>		
12/31/1992-12/31/1995	FY94: \$95,000	TOTAL: \$190,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H MEYER	HQ/M C LEE	12-Chemistry	
NAGW 3655	Duke University	6335	PHYSICAL AND METEOROLOGICAL REGULATION OF OCEANIC PRIMARY PRODUCTION IN THE EQUATORIAL PACIFIC
<i>Period</i>	<i>Obligations</i>		
06/14/1993-12/31/1994	FY94: \$52,129	TOTAL: \$103,556	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R BARBER	HQ/R E MURPHY	33-Oceanography	
	HQ/S G TILFORD		
NCA 2-617	Duke University	6336	FAULT TREE MODELS OF FAULT TOLERANT DISTRIBUTED SYSTEMS.
<i>Period</i>	<i>Obligations</i>		
05/28/1991-05/31/1993	FY94: \$0	TOTAL: \$80,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J B DUGAN	ARC/A PATTERSON-HINE	22-Computer Science	
NCA 2-825	Duke University	6337	DIGRAPH TECHNIQUES FOR DEPENDABILITY ANALYSIS OF F AULT TOLERANT SYSTEMS
<i>Period</i>	<i>Obligations</i>		
06/03/1993-05/31/1994	FY94: \$0	TOTAL: \$40,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J B DUGAN	ARC/M A BOYD	22-Computer Science	
NGT 00-030-069	Duke University	6338	NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
<i>Period</i>	<i>Obligations</i>		
09/19/1991-08/31/1995	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A E HARTLEY	HQ/D M BUTLER	39-Env Sci, NEC	
W SCHLESINGER	HQ/G S WILSON		
NGT 00-030-077	Duke University	6339	NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
<i>Period</i>	<i>Obligations</i>		
09/19/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A F CROSS	HQ/D M BUTLER	39-Env Sci, NEC	
W H SCHLESINGER	HQ/G S WILSON		
NGT 00-030-199	Duke University	6340	NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
<i>Period</i>	<i>Obligations</i>		
09/01/1993-08/31/1995	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W H SCHLESINGER	HQ/G ASRAR	39-Env Sci, NEC	
	HQ/D M BUTLER		
NGT 00-030-211	Duke University	6341	NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
<i>Period</i>	<i>Obligations</i>		
09/02/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R OREN	HQ/G ASRAR	31-Atmos Sci	
	HQ/D M BUTLER		
NGT 00-050-989	Duke University	6342	NASA GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
07/30/1992-10/31/1994	FY94: \$4,300	TOTAL: \$48,300	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L N VIRGIN	LARC/E PRIOR	46-Mech Engr	
NGT 00-051-105	Duke University	6343	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
05/24/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D B BLISS	LARC/E PRIOR	46-Mech Engr	
NGT 00-051-310	Duke University	6344	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
07/29/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D B BLISS	M MOORE	46-Mech Engr	
NGT 00-051-313	Duke University	6345	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
08/23/1994-05/31/1995	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J B DUGAN	ARC/M MOORE	22-Computer Science	

**NASA'S UNIVERSITY PROGRAM
NORTH CAROLINA (Continued)**

NGT 00-090-166 Duke University 6346
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/25/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Pnn Invest NASA Tech. Officer CASE Category
E H DOWELL HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-040 Fayetteville State University 6354
MINORITY SCIENCE ENGINEERING PROGRAM
Period Obligations
08/30/1991-08/31/1994 FY94: \$0 TOTAL: \$164,039
Pnn Invest NASA Tech. Officer CASE Category
L EDWARDS HQ/B WHITE 49-Engr, NEC

NSG-3160 Duke University 6347
ACCELERATION OF CONVERGENCE
Period Obligations
06/01/1977-08/31/1993 FY94: TOTAL: \$236,661
Pnn Invest NASA Tech. Officer CASE Category
D A SMITH LERC/W F FORD 21-Mathematics

NGT 00-090-124 Fayetteville State University 6355
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Pnn Invest NASA Tech. Officer CASE Category
L EDWARDS HQ/D K RUSSELL 99-Multi-Discip

NAGW 2927 East Carolina University 6348
NEURAL REGULATION OF BONE RESORPTION DURING SIMULATED
WEIGHTLESSNESS IN THE RAT
Period Obligations
02/27/1992-09/30/1994 FY94: \$0 TOTAL: \$9,790
Pnn Invest NASA Tech. Officer CASE Category
D M TERRIAN HQ/J H STOKLOSA 59-Life Sci, NEC

NGT 00-090-244 Fayetteville State University 6356
NGT 90244/B FAYETTEVILLE STATE UNIV. 'GRAPHING CALCULATOR
INSTITUTE'
Period Obligations
05/03/1994-03/31/1995 FY94: \$49,167 TOTAL: \$49,167
Pnn Invest NASA Tech. Officer CASE Category
L EDWARDS HQ/B L WHITE 21-Mathematics

NCC 2-810 East Carolina University 6349
PHYSIOLOGICAL ANATOMICAL RODENT EXPERIMENT (PARE) .04
FEASIBILITY TEST 1
Period Obligations
07/16/1993-10/31/1994 FY94: \$30,542 TOTAL: \$78,115
Pnn Invest NASA Tech. Officer CASE Category
H W BURDEN ARC/C M WINGET 51-Biological Sci
ARC/C C JAHNS

NAG 8-223 Guilford College 6357
JOVE
Period Obligations
01/24/1992-05/31/1997 FY94: \$11,937 TOTAL: \$102,937
Pnn Invest NASA Tech. Officer CASE Category
C ALMY MSFC/F SIX 99-Multi-Discip
T ESPINOLA

NCC 2-864 East Carolina University 6350
MICROGRAVITY AND PLACENTAL DEVELOPMENT
Period Obligations
06/23/1994-04/30/1995 FY94: \$81,382 TOTAL: \$81,382
Pnn Invest NASA Tech. Officer CASE Category
R H RENEGAR ARC/D A REISS-BUBENHEIM 51-Biological Sci
ARC/C M WINGET

NAG 3-1623 Johnson C. Smith University 6358
THE CONSERVATION/SOLUTION ELEMENT METHOD FOR NAVIER
STOKES EQUATION, SUPERSONIC AND TRANSONIC FLOWS
Period Obligations
06/22/1994-06/21/1995 FY94: \$100,000 TOTAL: \$100,000
Pnn Invest NASA Tech. Officer CASE Category
J O ADEYEYE LERC/J R SCOTT 29-Math/Computer, NEC
N F ATTIA

NCC 2-866 East Carolina University 6351
PHYSIOLOGICAL ANATOMICAL RODENT EXPERIMENT (PARE) .04;
FLIGHT SUPPORT
Period Obligations
07/05/1994-04/14/1995 FY94: \$86,467 TOTAL: \$86,467
Pnn Invest NASA Tech. Officer CASE Category
H W BURDEN ARC/D A REISS-BUBENHEIM 51-Biological Sci
ARC/C M WINGET

NAG 1-956 North Carolina A&T State University 6359
A SPACE TECHNOLOGY DEVELOPMENT AND UTILIZATION
PROGRAM
Period Obligations
01/13/1989-09/30/1994 FY94: \$514,277 TOTAL: \$4,500,349
Pnn Invest NASA Tech. Officer CASE Category
L SHARPE LARC/S E MASSENBERG 99-Multi-Discip
A HOMAIFAR LARC/E J PRIOR
A CHOWDHURY

NAG 8-996 Fayetteville State University 6352
JOVE
Period Obligations
11/19/1993-05/31/1995 FY94: \$38,879 TOTAL: \$38,879
Pnn Invest NASA Tech. Officer CASE Category
J WU MSFC/F SIX 13-Physics

NAG 1-997 North Carolina A&T State University 6360
DYNAMIC ANALYSIS OF THE JOINT DOMINATED BEAM
Period Obligations
05/03/1989-12/18/1993 FY94: TOTAL: \$154,172
Pnn Invest NASA Tech. Officer CASE Category
E G ABU-SABA LARC/R C MONTGOMERY 42-Astro Engr
W M MCGINLEY LARC/J P WILLIAMS

NAGW 3083 Fayetteville State University 6353
TIMS A MODEL FOR PRE-SERVICE AND IN-SERVICE TEACHER
TRAINING MIDDLE SCHOOL LEVEL
Period Obligations
05/15/1992-07/31/1994 FY94: \$0 TOTAL: \$82,850
Pnn Invest NASA Tech. Officer CASE Category
L EDWARDS HQ/D GALLAWAY 21-Mathematics

NAG 1-1287 North Carolina A&T State University 6361
TURBULENCE MODELING FOR HIGH SPEED COMPRESSIBLE
FLOWS
Period Obligations
05/30/1991-09/30/1993 FY94: TOTAL: \$24,986
Pnn Invest NASA Tech. Officer CASE Category
S CHANDRA LARC/T B GATSKI 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
NORTH CAROLINA (Continued)**

NAG 1-1454 North Carolina A&T State University 6362
DEVELOPMENT OF PREDICTIVE MODELS USING REMOTELY SENSED
DATA FOR SIMULATING DAMAGE POTENTIALS TO NA

Period	Obligations	
09/18/1992-03/31/1995	FY94: \$129,832	TOTAL: \$254,832
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G A UZOUKURU	LARC/R L YANG	39-Env Sci, NEC
E U NZEWI	GSFC/E LEVINE	
G A GAYLE		

NAS 1-19157 North Carolina A&T State University 6369
EXPERIMENTAL, DEVELOPMENTAL AND BASIC AND APPLIED
RESEARCH

Period	Obligations	
08/03/1990-08/02/1995	FY94: \$994,812	TOTAL: \$4,481,540
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L SHARPE	LARC/S E MASSENBERG	99-Multi-Discip
	LARC/E J PRIOR	

NAG 1-1604 North Carolina A&T State University 6363
ASSESSMENT OF LARGE DEFORMATION IN MULTIPLE DELAMINATED
COMPOSITE LAMINATES SUBJECTED TO A TRANSVERSE

Period	Obligations	
02/01/1994-10/31/1994	FY94: \$54,806	TOTAL: \$54,806
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K N SHIVAKUMAR	LARC/C C POE JR.	47-Materials Engr
V S AVVA	LARC/W C JACKSON	
R L SADLER		

NGT 00-050-841 North Carolina A&T State University 6370
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/22/1991-06/30/1993	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D DUNN	HQ/F C OWENS	46-Mech Engr

NAG 3-976 North Carolina A&T State University 6364
MATERIALS STUDIES FOR SOLAR CELL STRUCTURES

Period	Obligations	
01/26/1989-12/31/1995	FY94: \$86,250	TOTAL: \$356,250
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W COLLY	LERC/I WEINBERG	45-Elec Engr
A A-FADR	LERC/D J FLOOD	
I SHANTI		

NGT 00-090-083 North Carolina A&T State University 6371
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
09/26/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L SHARPE	HQ/D K RUSSELL	99-Multi-Discip

NAG 3-1432 North Carolina A&T State University 6365
GRAPHITE FIBER TEXTILE PREFORM/COPPER MATRIX COMPOSITE

Period	Obligations	
12/30/1992-12/31/1995	FY94: \$152,857	TOTAL: \$309,857
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G J FILATOVS	LERC/R V MINER	47-Materials Engr
R L SADLER		

NGT 00-090-084 North Carolina A&T State University 6372
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
09/26/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L SHARPE	HQ/D K RUSSELL	99-Multi-Discip

NAG 3-1452 North Carolina A&T State University 6366
DEVELOPMENT OF PROCESSING, FABRICATION AND EVALUATION
OF GRAPHITE FIBER-REINFORCED POLYIMIDE TUBES

Period	Obligations	
02/08/1993-03/07/1995	FY94: \$129,963	TOTAL: \$253,168
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V S AVVA	LERC/R D VANNUCCI	46-Mech Engr
R L SADLER		

NGT 00-090-085 North Carolina A&T State University 6373
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/12/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L SHARPE	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-086 North Carolina A&T State University 6374
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/12/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L SHARPE	HQ/D K RUSSELL	99-Multi-Discip

NAG 9-334 North Carolina A&T State University 6367
VLSI DESIGN/DIGITAL SIGNAL PROCESSING

Period	Obligations	
01/03/1989-08/31/1993	FY94:	TOTAL: \$200,952
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J FOSTER	JSC/C HERMAN	19-Phys Sci, NEC

NGT 00-090-087 North Carolina A&T State University 6375
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
09/12/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L SHARPE	HQ/D K RUSSELL	99-Multi-Discip

NAGW 2924 North Carolina A&T State University 6368
THE CENTER FOR AEROSPACE RESEARCH

Period	Obligations	
02/28/1992-12/31/1994	FY94: \$1,349,038	TOTAL: \$3,674,276
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J C KELLY JR.	HQ/S E MASSENBERG	99-Multi-Discip
	HQ/S HARTMAN	

NGT 00-090-088 North Carolina A&T State University 6376
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
09/12/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L SHARPE	HQ/D K RUSSELL	99-Multi-Discip

**NASA'S UNIVERSITY PROGRAM
NORTH CAROLINA (Continued)**

NAG 1-244 North Carolina State Univ. - Raleigh 6377
NUMERICAL SOLUTIONS OF THE COMPLETE NAVIER - STOKES EQUATIONS
Period *Obligations*
12/04/1981-05/15/1995 FY94: \$0 TOTAL: \$655,634
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H A HASSAN LARC/J E HARRIS 41-Aero Engr
E GANTT LARC/D H RUDY
R W WALTERS

NAG 1-983 North Carolina State Univ. - Raleigh 6378
MULTIVERSION SOFTWARE RELIABILITY THROUGH FAULT AVOIDANCE AND FAULT-TOLERANCE
Period *Obligations*
03/01/1989-10/31/1994 FY94: \$0 TOTAL: \$377,670
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A VOUK LARC/D E ECKHARDT 22-Computer Science
D F MCALLISTER

NAG 1-1212 North Carolina State Univ. - Raleigh 6379
GEOMETRIC MODELLING OF TEXTILE REINFORCEMENT FOR STRUCTURAL ANALYSIS
Period *Obligations*
02/01/1991-12/31/1994 FY94: \$61,910 TOTAL: \$233,261
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C M PASTORE LARC/C C POE 47-Materials Engr
LARC/C E HARRIS

NAG 1-1214 North Carolina State Univ. - Raleigh 6380
ANALYSIS OF DETECTORS FOR THE INTERPLANETARY DUST EXPERIMENT (LDEF AO201)
Period *Obligations*
01/28/1991-03/31/1995 FY94: \$0 TOTAL: \$259,045
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D P GRIFFIS LARC/L A TEICHMAN 47-Materials Engr
J J WORTMAN

NAG 1-1283 North Carolina State Univ. - Raleigh 6381
TELEROBOTIC CONTROL OF A MOBILE COORDINATED ROBOTIC SERVICER
Period *Obligations*
05/24/1991-05/31/1995 FY94: \$0 TOTAL: \$231,901
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G K LEE LARC/J JUANG 42-Astro Engr
LARC/L HORTA

NAG 1-1340 North Carolina State Univ. - Raleigh 6382
TIME ACCURATE COMPUTATION OF UNSTEADY SPIKE TIPPED BODY FLOWS WITH A DYNAMIC FLOW ADAPTIVE MESH
Period *Obligations*
08/28/1991-11/15/1994 FY94: \$0 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D S MCRAE LARC/R E SMITH 41-Aero Engr
LARC/J J LAMBIOTTE

NAG 1-1436 North Carolina State Univ. - Raleigh 6383
COMPUTATIONAL CONTROL OF FLEXIBLE AEROSPACE SYSTEMS
Period *Obligations*
05/12/1992-08/31/1995 FY94: \$73,880 TOTAL: \$226,624
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L SHARPE LARC/L W TAYLOR 42-Astro Engr

NAG 1-1600 North Carolina State Univ. - Raleigh 6384
COMPUTATION OF FEEDBACK GAINS AND COMPENSATORS IN A NOISE SUPPRESSION CONTROL SYSTEM
Period *Obligations*
03/25/1994-03/29/1995 FY94: \$50,371 TOTAL: \$50,371
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H T BANKS LARC/R J SILCOX 41-Aero Engr
R C SMITH LARC/H C LESTER

NAG 2-684 North Carolina State Univ. - Raleigh 6385
HETEROGENEOUS PHOTOCATALYTIC OXIDATION OF ATMOSPHERIC TRACE CONTAMINANTS
Period *Obligations*
11/16/1990-10/31/1993 FY94: \$0 TOTAL: \$186,837
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D F OLLIS ARC/E L FORCE 43-Chem Engr
ARC/W E BERRY

NAG 3-855 North Carolina State Univ. - Raleigh 6386
AERODYNAMICS AND ACOUSTIC INTERACTION OF COUNTER ROTATION PROPELLERS
Period *Obligations*
01/19/1988-07/27/1993 FY94: TOTAL: \$368,956
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R T NAGEL LERC/E A KREJSA 41-Aero Engr
LERC/J F GROENEWEG

NAG 5-1042 North Carolina State Univ. - Raleigh 6387
STUDY OF PARTICLE INJECTION AND ACCELERATION IN PARABOLIC AND OBLIQUE SHOCKS
Period *Obligations*
03/15/1988-06/30/1993 FY94: \$0 TOTAL: \$112,789
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D C ELLISON GSFC/F C JONES 13-Physics

NAG 5-1790 North Carolina State Univ. - Raleigh 6388
MESO-BETA SCALE NUMERICAL SIMULATION STUDIES OF THERMAL-INDUCED JET STREAK MASS/MOMENTUM PERTURBATIONS
Period *Obligations*
11/01/1991-11/14/1994 FY94: \$85,000 TOTAL: \$255,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Y L LIN GSFC/S E KOCH 31-Atmos Sci
M L KAPLAN

NAG 5-2212 North Carolina State Univ. - Raleigh 6389
1) SEARCH FOR X-RAY EMISSION FROM HIGH LATITUDE SUPERNOVA REMNANT DA 530 2) ELECTRON HEATING...
Period *Obligations*
02/18/1993-02/28/1995 FY94: \$0 TOTAL: \$28,864
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S P REYNOLDS GSFC/R PETRE 11-Astronomy

NAG 5-2254 North Carolina State Univ. - Raleigh 6390
THE PHYSICAL FOUNDATIONS OF PARTICLE ACCELERATION BY COLLISIONLESS SHOCKS IN SPACE
Period *Obligations*
04/27/1993-04/30/1995 FY94: \$124,000 TOTAL: \$203,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D C ELLISON GSFC/T J BIRMINGHAM 13-Physics
GSFC/J D BOHLIN

NAG 5-2580 North Carolina State Univ. - Raleigh 6391
MASSIVE X-RAY BINARIES: TESTING THE CURRENT PARADIGM
Period *Obligations*
04/21/1994-04/30/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BLENDIN GSFC/N WHITE 13-Physics

**NASA'S UNIVERSITY PROGRAM
NORTH CAROLINA (Continued)**

NAG 5-2589 North Carolina State Univ. - Raleigh 6392
OBSERVATIONAL AND NUMERICAL STUDIES OF EXTREME FRO
NTAL SCALE CONTRACTION

Period	Obligations	
05/10/1994-06/30/1995	FY94: \$40,000	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S E KOCH	GSFC/R F ADLER	31-Atmos Sci

NAGW 838 North Carolina State Univ. - Raleigh 6393
SEASONAL S13C VARIATIONS OF BIOGENIC METHANE

Period	Obligations	
10/01/1994-12/31/1992	FY94: \$0	TOTAL: \$938,043
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N E BLAIR	HQ/M J KURYLO	39-Env Sci, NEC
	HQ/R T WATSON	

NAGW 1072 North Carolina State Univ. - Raleigh 6394
RESEARCH IN HYPERSONIC AERODYNAMICS

Period	Obligations	
04/15/1987-06/30/1994	FY94: \$0	TOTAL: \$1,000,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R DEJARNETTE	HQ/S M WANDER	19-Phys Sci, NEC
F D HART	HQ/R A GRAVES	

NAGW 1331 North Carolina State Univ. - Raleigh 6395
SPACE ENGINEERING RESEARCH CENTER

Period	Obligations	
07/12/1988-10/31/1994	FY94: \$1,250,000	TOTAL: \$10,942,440
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F R DEJARNETTE	HQ/S M WANDER	49-Engr, NEC

NAGW 2001 North Carolina State Univ. - Raleigh 6396
DIFFUSIVE SHOCK ACCELERATION AND COSMIC RAY TRANSP ORT:
A SIMULATION APPROACH

Period	Obligations	
04/25/1990-02/28/1993	FY94: \$0	TOTAL: \$191,347
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D C ELLISON	HQ/W V JONES	13-Physics
	HQ/J C LING	

NAGW 2865 North Carolina State Univ. - Raleigh 6397
THE CONTROL OF THE PRITY AND STOICHIOMETRY OF COMP
UND SEMI BY HIGH PRESSURE VAPOR TRANSPORT

Period	Obligations	
01/31/1992-02/14/1995	FY94: \$166,854	TOTAL: \$499,810
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K J BACHMANN	HQ/J K ALEXANDER	47-Materials Engr
	HQ/D A HOLLAND	

NAGW 3120 North Carolina State Univ. - Raleigh 6398
NAGW-3120/NORTH CAROLINA STATE UNIV/STATISTICAL ANALYSIS
OF ATMOSPHERE DATA

Period	Obligations	
06/26/1992-06/30/1994	FY94: \$0	TOTAL: \$77,808
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P BLOOMFIELD	HQ/J A KAYE	31-Atmos Sci
	HQ/R E MURPHY	

NAGW 3575 North Carolina State Univ. - Raleigh 6399
INFLUENCE OF VERTICAL MIXING ON THE SEA WIFS ALGOR
ITHMS

Period	Obligations	
05/26/1993-03/31/1995	FY94: \$0	TOTAL: \$50,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D KAMYKOWSKI	HQ/D E WICKLAND	33-Oceanography
	HQ/A C JANETOS	

NAGW 3658 North Carolina State Univ. - Raleigh 6400
HYDRODYNAMIC FLOWS IN X-RAY BINARIES

Period	Obligations	
06/15/1993-03/31/1995	FY94: \$21,000	TOTAL: \$32,215
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M BLONDIN	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

NAGW 3806 North Carolina State Univ. - Raleigh 6401
CORNELIUS LANCZOS INTERNATIONAL CENTENARY

Period	Obligations	
10/28/1993-09/30/1994	FY94: \$10,000	TOTAL: \$10,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M BLONDIN	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

NAS 1-18944 North Carolina State Univ. - Raleigh 6402
SAGE III SCIENCE INVESTIGATION SUPPORT; P.I. PROFESSOR
SAXENA

Period	Obligations	
10/06/1989-01/31/1995	FY94: \$25,000	TOTAL: \$51,637
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V SAXENA	LARC/G MADDREA	19-Phys Sci, NEC

NAS 5-30698 North Carolina State Univ. - Raleigh 6403
GLRS SCIENCE TEAM MEMBER STUDY

Period	Obligations	
06/20/1989-12/31/1993	FY94: \$10,000	TOTAL: \$110,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S COHEN	GSFC/G SOFFEN	32-Geological Sci

NCA 2-719 North Carolina State Univ. - Raleigh 6404
NUMERICAL SIMULATION OF SUPERSONIC AND HYPERSONIC INLET
FLOW FIELD

Period	Obligations	
05/21/1992-08/31/1994	FY94: \$0	TOTAL: \$79,568
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D S MCRAE	ARC/T EDWARDS	21-Mathematics

NCC 1-22 North Carolina State Univ. - Raleigh 6405
COMPUTATIONAL FLUID MECHANICS

Period	Obligations	
06/15/1979-09/14/1994	FY94: \$0	TOTAL: \$1,374,170
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H A HASSAN	LARC/J E HARRIS	41-Aero Engr
F R DEJARNETTE	LARC/J D KELLER	

NCC 1-100 North Carolina State Univ. - Raleigh 6406
APPROX. NUMERICAL METHODS FOR CALCULATING
NONEQUILIBRIUM VISCOUS FLOW FIELDS AND AERODYNAMIC HEAT
ETC.

Period	Obligations	
07/16/1985-11/30/1994	FY94: \$1	TOTAL: \$404,054
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F R DEJARNETTE	LARC/E V ZOBY	41-Aero Engr

NCC 1-112 North Carolina State Univ. - Raleigh 6407
STUDY OF THE TRANSITIONAL FLOW REGIME USING THE MONTE
CARLO METHODS

Period	Obligations	
03/10/1987-03/14/1995	FY94: \$221,000	TOTAL: \$1,091,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H A HASSAN	LARC/K SUTTON	41-Aero Engr
	LARC/J N MOSS	

NASA'S UNIVERSITY PROGRAM **NORTH CAROLINA (Continued)**

NCC 1-140 North Carolina State Univ. - Raleigh 6408
 STUDY OF NUMERICAL AND PHYSICAL ISSUES ASSOCIATED WITH
 CONTINUUM HYPERVELOCITY RE-ENTRY FLOWS
Period *Obligations*
 01/31/1990-09/30/1994 FY94: \$0 TOTAL: \$176,677
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G V CANDLER LARC/K SUTTON 41-Aero Engr
 LARC/P A GNOFFO

NCC 1-141 North Carolina State Univ. - Raleigh 6409
 DEVELOPMENT OF MODEL SYSTEMS DYNAMICS MEASUREMENTS
 AND MONITORING SYSTEM FOR NATIONAL TRANSONIC FAC.
Period *Obligations*
 04/17/1990-10/31/1994 FY94: \$114,292 TOTAL: \$465,541
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F R DEJARNETTE LARC/J S HILL 41-Aero Engr
 LARC/D E FULLER

NCC 1-154 North Carolina State Univ. - Raleigh 6410
 TRANSPORT HIGH-LIFT FLIGHT RESEARCH
Period *Obligations*
 05/15/1991-03/14/1995 FY94: \$26,039 TOTAL: \$115,935
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J N PERKINS LARC/L P YIP 41-Aero Engr
 J HARDING

NCC 1-162 North Carolina State Univ. - Raleigh 6411
 AN EXPERIMENTAL INVESTIGATION OF SUCTION BOUNDARY LAYER
 CONTROL ON LEADING EDGE FLAPS
Period *Obligations*
 02/28/1992-02/20/1996 FY94: \$42,613 TOTAL: \$109,204
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J N PERKINS LARC/P L COE 41-Aero Engr

NCC 1-168 North Carolina State Univ. - Raleigh 6412
 MULTIDISCIPLINARY DESIGN AND OPTIMIZATION TECH: NICQUES
 FOR CONCEPTUAL AEROSPACE VEHICLE DESIGN
Period *Obligations*
 08/31/1992-08/31/1993 FY94: TOTAL: \$36,407
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G D WALBERG LARC/W T DAVIS 42-Astro Engr

NCC 1-169 North Carolina State Univ. - Raleigh 6413
 SEMI-SPAN MODEL TESTING IN THE NATIONAL TRANSONIC
 FACILITY - A NUMERICAL STUDY
Period *Obligations*
 09/22/1992-10/30/1994 FY94: \$52,515 TOTAL: \$94,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N CHOKANI LARC/J A AL-SAAD 41-Aero Engr
 LARC/R A WAHLS

NCC 1-170 North Carolina State Univ. - Raleigh 6414
 AN EVALUATION OF RUSSIAN ANALYSES OF HIGH-TEMPERA- TURE
 NONEQUILIBRIUM GAS FLOWS
Period *Obligations*
 02/03/1993-05/30/1995 FY94: \$0 TOTAL: \$95,079
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G D WALBERG LARC/P A GNOFFO 41-Aero Engr

NCC 1-183 North Carolina State Univ. - Raleigh 6415
 AN EXPERIMENTAL STUDY OF HIGH SPEED CONE BOUNDARY
 LAYER STABILITY AND TRANSITION NLPN 93-514
Period *Obligations*
 07/21/1993-05/31/1995 FY94: \$52,884 TOTAL: \$56,894
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N CHEKANI LARC/S P WILKINSON 41-Aero Engr
 J J LACHOWICZ

NCC 1-185 North Carolina State Univ. - Raleigh 6416
 SYSTEMS ANALYSIS AND TECHNOLOGY APPLICATIONS FOR
 AEROSPACE VEHICLES
Period *Obligations*
 08/10/1993-08/14/1995 FY94: \$42,052 TOTAL: \$69,334
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G D WALBERG LARC/H W STONE 42-Astro Engr
 J R OLDS LARC/L F ROWELL

NCC 1-188 North Carolina State Univ. - Raleigh 6417
 NUMERICAL MODELING STUDIES OF WAKE VORTEX TRANSPOR T
 AND EVOLUTION WITHIN THE PLANETARY BOUNDARY LAY
Period *Obligations*
 01/11/1994-01/06/1995 FY94: \$140,000 TOTAL: \$140,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 Y L LIN LARC/F H PROCTOR 31-Atmos Sci
 S P ARYA LARC/D A HINTON
 M L KAPLAN

NCC 2-101 North Carolina State Univ. - Raleigh 6418
 PLANT GROWTH IN CONTROLLED ENVIRONMENTS IN RESPONSE
 TO CHARACTERISTICS OF NUTRIENT SOLUTIONS
Period *Obligations*
 01/01/1981-02/28/1994 FY94: \$0 TOTAL: \$853,957
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C D RAPERJR ARC/R MACELROY 55-Agriculture Sci
 L T HENRY

NGT 00-030-117 North Carolina State Univ. - Raleigh 6419
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C C SPAUR HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NGT 00-040-031 North Carolina State Univ. - Raleigh 6420
 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRA M
Period *Obligations*
 03/22/1991-02/28/1995 FY94: \$205,000 TOTAL: \$730,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G N WALBERG HQ/L KEFFER 99-Multi-Discip

NGT 00-050-591 North Carolina State Univ. - Raleigh 6421
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 08/27/1990-09/30/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W J RASDORF HQ/F C OWENS 44-Civil Engr

NGT 00-051-005 North Carolina State Univ. - Raleigh 6422
 NGT-51005/NORTH CAROLINA STATE UNIV/GRADUATE STUDENT
 RESEARCHRS PROGRAM
Period *Obligations*
 08/18/1992-06/30/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G V CANDLER LARC/E PRIOR 41-Aero Engr

NGT 00-051-189 North Carolina State Univ. - Raleigh 6423
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 09/29/1993-08/15/1996 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D S MCRAE LARC/L EVANS 41-Aero Engr

**NASA'S UNIVERSITY PROGRAM
NORTH CAROLINA (Continued)**

NGT 00-051-248 North Carolina State Univ. - Raleigh 6424
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/14/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F YUAN	LARC/L EVANS	41-Aero Engr

NGT 00-070-236 North Carolina State Univ. - Raleigh 6425
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
09/17/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G LUCOUSKY	LERC/F MONTEGANI	13-Physics

NGT 00-070-344 North Carolina State Univ. - Raleigh 6426
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
07/14/1993-08/14/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W ALEXANDER	HQ/D K RUSSELL	45-Elec Engr

NGT 00-070-402 North Carolina State Univ. - Raleigh 6427
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
09/29/1994-07/31/1997	FY94: \$44,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W E ALEXANDER	HQ/D K RUSSELL	45-Elec Engr
D AGRAWAL		

NGT 00-090-126 North Carolina State Univ. - Raleigh 6428
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM/UMF

Period	Obligations	
10/29/1992-08/14/1995	FY94: \$10,032	TOTAL: \$33,032
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R TURNER	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-225 North Carolina State Univ. - Raleigh 6429
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

Period	Obligations	
09/17/1993-08/14/1995	FY94: \$10,032	TOTAL: \$22,032
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V R JENKINS	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-135 Pembroke State University 6430
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
10/08/1992-08/14/1994	FY94: \$3,730	TOTAL: \$15,730
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A LOCKLEAR	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-136 Pembroke State University 6431
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
11/02/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A LOCKLEAR	HQ/D K RUSSELL	99-Multi-Discip

NGT 00-090-041 Shaw University 6432
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)

Period	Obligations	
08/22/1991-08/31/1994	FY94: \$0	TOTAL: \$109,871
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M CLAYTON	HQ/B WHITE	49-Engr, NEC

NAG 5-2023 University of North Carolina - Ashville 6433
POLAR CAP MODELS OF PULSAR GAMMA RAY EMISSION

Period	Obligations	
07/17/1992-07/31/1993	FY94: \$0	TOTAL: \$71,341
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J K DAUGHERTY	GSFC/J P NORRIS	11-Astronomy
	GSFC/N WHITE	

NAG 5-2518 University of North Carolina - Ashville 6434
STUDIES OF HIGH ENERGY PULSARS WITH EGRET

Period	Obligations	
02/16/1994-02/28/1995	FY94: \$39,882	TOTAL: \$39,882
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J K DAUGHERTY	GSFC/J P NORRIS	11-Astronomy
D J THOMPSON	GSFC/N WHITE	

NAG 5-2116 University of North Carolina - Chapel Hill 6435
CHROMOSPHERIC ACTIVITY IN THE SUBGIANT BRANCH

Period	Obligations	
10/08/1992-03/31/1995	FY94: \$3,999	TOTAL: \$13,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S C BALACHANDRAN	GSFC/D WEST	11-Astronomy

NAG 5-2347 University of North Carolina - Chapel Hill 6436
ENTRAINED GAS IN THE SPATIALLY RESOLVED BRAIDED JETS OF THE NEARBY GALAXY NGC 4258

Period	Obligations	
08/10/1993-08/14/1994	FY94: \$25,000	TOTAL: \$25,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G N CECIL	GSFC/R PETRE	11-Astronomy

NAG 5-2543 University of North Carolina - Chapel Hill 6437
EVOLUTION OF SUBSTRUCTURE IN NEARBY CLUSTERS OF GALAXIES

Period	Obligations	
03/03/1994-03/14/1995	FY94: \$15,000	TOTAL: \$15,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A ROSE	GSFC/R PETRE	11-Astronomy

NAGW 834 University of North Carolina - Chapel Hill 6438
SEASONAL VARIATIONS IN ISOTOPIC SIGNATURES OF METHANE

Period	Obligations	
10/01/1985-12/31/1994	FY94: \$0	TOTAL: \$612,870
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C S MARTENS	HQ/M J KURYLO	39-Env Sci, NEC
	HQ/R T WATSON	

NAGW 1455 University of North Carolina - Chapel Hill 6439
RADON TRACING OF BIOGENIC GAS FLUXES FROM COASTAL WETLANDS

Period	Obligations	
09/08/1988-12/31/1994	FY94: \$100,000	TOTAL: \$826,643
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C S MARTENS	HQ/D E WICKLAND	39-Env Sci, NEC

**NASA'S UNIVERSITY PROGRAM
NORTH CAROLINA (Continued)**

NAGW 1576 University of North Carolina - Chapel Hill 6440
INFRARED SPECTROSCOPY OF NEUTRAL AND IONIC WATER COMPLEXES

Period	Obligations	
12/21/1988-10/31/1996	FY94: \$60,017	TOTAL: \$280,926
Prin. Invest.	NASA Tech. Officer	CASE Category
R E MILLER	HQ/J T BERGSTALH	11-Astronomy

NAGW 2934 University of North Carolina - Chapel Hill 6441
THE ASTROPHYSICS OF HYDRODYNAMICS FLOWS IN COMPACT INTERACTING BINARIES

Period	Obligations	
02/27/1992-12/31/1993	FY94: \$0	TOTAL: \$48,785
Prin. Invest.	NASA Tech. Officer	CASE Category
J M BLONDIN	HQ/L J KALUZIENSKI	11-Astronomy
C EVANS	HQ/A N BUNNER	

NAGW 3681 University of North Carolina - Chapel Hill 6442
CONTROLS ON FLUXES AND ISOTOPIC COMPOSITION OF BIO GENIC GASES FROM WETLANDS, RIVERS AND FLOODED FOR

Period	Obligations	
07/23/1993-04/30/1996	FY94: \$120,000	TOTAL: \$220,000
Prin. Invest.	NASA Tech. Officer	CASE Category
C S MARTENS	HQ/D E WICKLAND	39-Env Sci, NEC
W USSLER III	HQ/A C JANETOS	

NAGW 3881 University of North Carolina - Chapel Hill 6443
NAGW-3881/B UNIV NORTH CAROLINA 'LAB. STUDIES OF NITRIC ACID HYDRATE AEROSOLS: FORMATION AND CHAR.'

Period	Obligations	
03/04/1994-03/31/1995	FY94: \$103,000	TOTAL: \$103,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R E MILLER	HQ/M J KURYLO	31-Atmos Sci
	HQ/A C JANETOS	

NAGW 3946 University of North Carolina - Chapel Hill 6444
BIOCHEMICAL CHANGES OF BONE IN A MODEL OF WEIGHT LESSNESS

Period	Obligations	
04/20/1994-04/30/1995	FY94: \$134,000	TOTAL: \$134,000
Prin. Invest.	NASA Tech. Officer	CASE Category
M YAMAUCHI	HQ/F M SULZMAN	51-Biological Sci

NAG10-144 University of North Carolina - Chapel Hill 6445
PLANT RESEARCH STATUS AND PROSPECTIVE

Period	Obligations	
08/29/1994-08/31/1994	FY94: \$205,313	TOTAL: \$205,313
Prin. Invest.	NASA Tech. Officer	CASE Category
T SCOTT	KSC/W M KNOTT	59-Life Sci, NEC

NGT 00-050-656 University of North Carolina - Chapel Hill 6446
NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/13/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000
Prin. Invest.	NASA Tech. Officer	CASE Category
C S MARTENS	HQ/F C OWENS	39-Env Sci, NEC

NGT 00-051-288 University of North Carolina - Chapel Hill 6447
GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/28/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
Prin. Invest.	NASA Tech. Officer	CASE Category
R E MILLER	HQ/D HOLLAND	12-Chemistry

NCA 2-629 University of North Carolina-Greensboro 6448
HR90 AND HR77 STATISTICAL ANALYSIS

Period	Obligations	
07/01/1991-06/30/1993	FY94: \$0	TOTAL: \$20,000
Prin. Invest.	NASA Tech. Officer	CASE Category
D A LUDWIG	ARC/J VERNIKOS	21-Mathematics

NAG 1-1414 University of North Carolina, Charlotte 6449
DYNAMICS AND CONTROL OF FLEXIBLE MULTI-BODY SPACE SYSTEMS

Period	Obligations	
03/20/1992-09/19/1994	FY94: \$20,000	TOTAL: \$99,000
Prin. Invest.	NASA Tech. Officer	CASE Category
Y P KAKAD	LARC/E S ARMSTRONG	42-Astro Engr
	LARC/S M JOSHI	

NAG 5-2038 University of North Carolina, Charlotte 6450
DESIGN AND SIMULATION OF EVA TOOLS FOR FIRST SERVING MISSION OF HST

Period	Obligations	
07/15/1992-07/14/1995	FY94: \$30,000	TOTAL: \$150,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P H DEHOFF	GSFC/M S JASTER	46-Mech Engr
D NAIK	GSFC/P W RICHARDS	

NAGW 4052 Wake Forest University 6451
THE ROLE OF THE ACTIN CYTOSKELETON IN AUXIN TRANSPORT AND GRAVITROPISMS

Period	Obligations	
06/30/1994-03/31/1997	FY94: \$71,865	TOTAL: \$71,865
Prin. Invest.	NASA Tech. Officer	CASE Category
G MUDAY	HQ/T W HALSTEAD	51-Biological Sci

NAS 2-10523 Wake Forest University 6452
CORRELATION OF MICRO AND MICROCIRCULATORY ALTERATIONS DURING WEIGHTLESSNESS

Period	Obligations	
01/17/1980-12/31/1994	FY94: \$0	TOTAL: \$2,050,560
Prin. Invest.	NASA Tech. Officer	CASE Category
P M HUTCHINS	ARC/G C JAHNS	51-Biological Sci
	ARC/P D SEBESTA	

NCC 1-55 Wake Forest University 6453
QUANTUM CHEMICAL STUDY OF METHANE OXIDATION SPECIES

Period	Obligations	
06/04/1981-12/31/1993	FY94: \$1	TOTAL: \$361,998
Prin. Invest.	NASA Tech. Officer	CASE Category
C F JACKELS	LARC/D H PHILLIPS	12-Chemistry
	LARC/R S ROGOWSKI	

NGT 00-090-050 Winston-Salem State University 6454
UNDERGRADUATE STUDENT RESEARCHERS PRG

Period	Obligations	
08/22/1991-08/31/1994	FY94: \$0	TOTAL: \$57,693
Prin. Invest.	NASA Tech. Officer	CASE Category
W ATKINSON	HQ/D RUSSELL	99-Multi-Discip

NASA'S UNIVERSITY PROGRAM NORTH DAKOTA

NORTH DAKOTA

NAG 3-1312 North Dakota State University 6455 STUDIES IN ACCELERATED CONVERGENCE

Period	Obligations	
12/23/1991-11/21/1994	FY94: \$66,857	TOTAL: \$177,907
Prin. Invest.	NASA Tech. Officer	CASE Category
D K COPE	LERC/W F FORD	21-Mathematics
Y XU	LERC/J A PENNLINE	

NAG 8-1007 North Dakota State University 6456 JOVE

Period	Obligations	
11/19/1993-05/31/1995	FY94: \$76,000	TOTAL: \$76,000
Prin. Invest.	NASA Tech. Officer	CASE Category
P HAMMOND	MSFC/F SIX	47-Materials Engr
D KURTZE		
A UNGAR		

NAGW 3620 Turtle Mountain Community College 6457 RECRUITMENT AND RETENTION OF INDIANS IN SCIENCE AND ENGINEERING

Period	Obligations	
05/28/1993-05/31/1995	FY94: \$26,000	TOTAL: \$51,000
Prin. Invest.	NASA Tech. Officer	CASE Category
S KARNAWAT	HQ/B WHITE	99-Multi-Discip

NAG 1-1351 University of North Dakota 6458 IN SITU MEASUREMENTS IN SUPPORT OF THE FIRE CIRRUS INTENSIVE FIELD OBSERVATIONS - II

Period	Obligations	
10/21/1991-03/31/1995	FY94: \$0	TOTAL: \$226,827
Prin. Invest.	NASA Tech. Officer	CASE Category
M R POELLOT	LARC/D S MCDUGAL	31-Atmos Sci
	LARC/T L OWENS	

NAG 3-1476 University of North Dakota 6459 CONTACT ANALYSIS IN SPIRAL BEVEL GEARS

Period	Obligations	
03/08/1993-03/07/1994	FY94:	TOTAL: \$11,185
Prin. Invest.	NASA Tech. Officer	CASE Category
G D BIBEL	LERC/R F HANDSCHUH	46-Mech Engr
	LERC/J J COY	

NAG 5-2696 University of North Dakota 6460 BRINGING VOLCANO REMOTE SENSING DATA TO CLASSROOMS NATIONAL PARKS AND MONUMENTS

Period	Obligations	
08/17/1994-08/31/1994	FY94: \$94,000	TOTAL: \$94,000
Prin. Invest.	NASA Tech. Officer	CASE Category
C A WOOD	GSFC/F HASLER	39-Env Sci, NEC

NAG 5-2699 University of North Dakota 6461 ANALYSIS OF IN SITU CONTRAIL MEASUREMENTS FROM FIRE CIRRUS IFO-II

Period	Obligations	
08/24/1994-08/31/1995	FY94: \$4,420	TOTAL: \$4,420
Prin. Invest.	NASA Tech. Officer	CASE Category
M POELLOT	GSFC/R W STEWART	11-Astronomy

NGT 00-040-043 University of North Dakota 6462

NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM

Period	Obligations	
05/24/1991-02/28/1995	FY94: \$170,000	TOTAL: \$663,000
Prin. Invest.	NASA Tech. Officer	CASE Category
C A WOOD	HQ/E T SCHWARTZ	99-Multi-Discip

OHIO

NAG 3-1528 Baldwin - Wallace College 6463

CHARACTERIZATION OF ION EXCHANGE POLYACRYLATE FILMS FOR ENVIRONMENTAL DECONTAMINATION

Period	Obligations	
09/23/1993-09/23/1994	FY94: \$0	TOTAL: \$6,600
Prin. Invest.	NASA Tech. Officer	CASE Category
J GROSE	LERC/A F RATAJCZAK	47-Materials Engr

NCC 3-157 Baldwin - Wallace College 6464

STATISTICAL MECHANICS OF FLUID IN A REDUCED GRAVITY ENVIRONMENT

Period	Obligations	
12/20/1989-10/15/1993	FY94: \$0	TOTAL: \$105,800
Prin. Invest.	NASA Tech. Officer	CASE Category
D G PROCTOR	LERC/R W VERNON	13-Physics

NCC 3-268 Baldwin - Wallace College 6465

CHARACTERIZATION OF ION EXCHANGE POLYACRYLATE FILMS FOR ENVIRONMENTAL DECONTAMINATION

Period	Obligations	
06/02/1992-04/10/1995	FY94: \$9,864	TOTAL: \$30,864
Prin. Invest.	NASA Tech. Officer	CASE Category
J GORSE	LERC/K W STREET	12-Chemistry
	LERC/W H PHILIPP	

NCC 3-300 Baldwin - Wallace College 6466

STUDY OF THE PREPARATION AND CHEMISTRY OF NOVEL OXIDE COATINGS

Period	Obligations	
03/16/1993-05/05/1995	FY94: \$20,000	TOTAL: \$43,000
Prin. Invest.	NASA Tech. Officer	CASE Category
J W MCCARGAR	LERC/E G WINTUCKY	12-Chemistry

NCC 3-315 Baldwin - Wallace College 6467

COMBUSTION, FLUIDS AND MATERIALS EXPERIMENTS IN A REDUCED GRAVITY ENVIRONMENT

Period	Obligations	
08/05/1993-07/21/1995	FY94: \$0	TOTAL: \$87,200
Prin. Invest.	NASA Tech. Officer	CASE Category
D G PROCTOR	LERC/J M FLOWERS	13-Physics
	LERC/H ROSS	

NAG 3-406 Case Western Reserve University 6468

CASE EARLY EXPOSURE TO ENGINEERING FOR MINORITY STUDENTS AND MINORITY ENGINEERS INDUSTRIAL MINORITY PROGRAM

Period	Obligations	
03/07/1983-08/31/1994	FY94: \$1	TOTAL: \$186,115
Prin. Invest.	NASA Tech. Officer	CASE Category
M E BOULDING	LERC/R F LAWRENCE	49-Engr, NEC
	LERC/J A BIAGLOW	

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAG 3-686 Case Western Reserve University 6469
HEAT FLUX SENSOR CALIBRATION
Period Obligations
12/19/1985-04/12/1994 FY94: \$0 TOTAL: \$504,195
Prin Invest NASA Tech Officer CASE Category
A DYBBS LERC/C H LIEBERT 46-Mech Engr

NAG 3-758 Case Western Reserve University 6470
STRUCTURAL AND ELECTRICAL CHARACTERIZATION OF LATTICE DEFECTS IN B-SIC
Period Obligations
11/14/1986-12/16/1994 FY94: \$75,066 TOTAL: \$695,224
Prin Invest NASA Tech Officer CASE Category
P PIROUZ LERC/J A POWELL 47-Materials Engr

NAG 3-795 Case Western Reserve University 6471
INTERACTION OF MOLECULES AND PARTICLES BY ANALYSIS OF COMPUTED TRAJECTORIES
Period Obligations
04/20/1987-12/16/1994 FY94: \$40,085 TOTAL: \$428,545
Prin Invest NASA Tech Officer CASE Category
I GREBER LERC/D C FERGUSON 13-Physics
H WACHMAN/C K PURVIS

NAG 3-832 Case Western Reserve University 6472
INVERS OF X-RAY TRANSF IN ANGULAR RANGE
Period Obligations
11/03/1987-08/09/1994 FY94: \$9,513 TOTAL: \$196,312
Prin Invest NASA Tech Officer CASE Category
S H IZEN LERC/A J DECKER 21-Mathematics

NAG 3-856 Case Western Reserve University 6473
FRACTURE MECHANICS OF CERAMIC MATRIX COMPOSTES
Period Obligations
12/21/1987-10/31/1994 FY94: \$0 TOTAL: \$330,276
Prin Invest NASA Tech Officer CASE Category
R BALLARINI LERC/B GROSS 47-Materials Engr
LERC/S J KLIMA

NAG 3-886 Case Western Reserve University 6474
GRAVITY-DEPENDENT TRANSPORT IN INDUSTRIAL PROCESSES
Period Obligations
04/12/1988-05/12/1995 FY94: \$160,000 TOTAL: \$1,219,774
Prin Invest NASA Tech Officer CASE Category
S OSTRACH LERC/A J RATAJCZAK 45-Elec Engr
Y KAMOTANI

NAG 3-922 Case Western Reserve University 6475
INVEST THE USE OF PARALLEL ASSOCIATE MEM TECH IN SPACE STATION POWER SYSTEM AUTON CONTROL
Period Obligations
08/01/1988-01/31/1994 FY94: \$0 TOTAL: \$250,000
Prin Invest NASA Tech Officer CASE Category
Y PAO LERC/J L DOLCE 45-Elec Engr
D J SOBAJIC LERC/J F SELLERS

NAG 3-980 Case Western Reserve University 6476
MEASUREMENTS FOR ROTORDYNAMIC COEFFICIENTS OF HYDROSTATIC BEARINGS
Period Obligations
01/25/1989-03/31/1994 FY94: \$0 TOTAL: \$242,540
Prin Invest NASA Tech Officer CASE Category
M L ADAMS LERC/R J CAPALDI 46-Mech Engr

NAG 3-1027 Case Western Reserve University 6477
OPTIMAL DESIGN OF ORTHOPAEDIC IMPLANTS
Period Obligations
04/13/1989-05/31/1995 FY94: \$0 TOTAL: \$350,984
Prin Invest NASA Tech Officer CASE Category
D T DAVY ARC/D A HOPKINS 49-Engr, NEC
ARC/C C CHAMIS

NAG 3-1046 Case Western Reserve University 6478
MODELING OF SOLID FUEL COMBUSTION IN VERY LOW-SPEED OXYGEN STREAMS
Period Obligations
05/18/1989-06/07/1994 FY94: \$105,000 TOTAL: \$492,405
Prin Invest NASA Tech Officer CASE Category
J S TIEN LERC/J A SALZMAN 49-Engr, NEC

NAG 3-1103 Case Western Reserve University 6479
PARTITIONING AND SCHEDULING OF FINE GRAIN COMPUTATIONS INTO PARALLEL MICROARCHITECTURES
Period Obligations
12/12/1989-09/05/1993 FY94: \$0 TOTAL: \$147,041
Prin Invest NASA Tech Officer CASE Category
C A PAPACHRISTOU LERC/D J ARPASI 22-Computer Science
LERC/J R SZUCH

NAG 3-1111 Case Western Reserve University 6480
ANALYSIS OF IMPEDANCE OF POROUS NICKEL/NICKEL-OXIDE ELECTRODE STRUCTURES
Period Obligations
01/09/1990-02/10/1993 FY94: \$0 TOTAL: \$60,000
Prin Invest NASA Tech Officer CASE Category
B D CAHAN LERC/M A REID 43-Chem Engr
O E CAFE

NAG 3-1130 Case Western Reserve University 6481
MODELING OF SHOCK BOUNDARY LAYER INTERACTIONS WITH BLEED
Period Obligations
01/16/1990-01/25/1995 FY94: \$23,565 TOTAL: \$84,739
Prin Invest NASA Tech Officer CASE Category
E RESHOTKO LERC/J D SAUNDERS 41-Aero Engr

NAG 3-1141 Case Western Reserve University 6482
COLLOIDAL PROCESSING STRATEGIES FOR FIBER-REINFORCED CERAMIC COMPOSITES
Period Obligations
03/05/1990-02/14/1993 FY94: \$0 TOTAL: \$865,413
Prin Invest NASA Tech Officer CASE Category
D L FEKE LERC/R T BHATT 47-Materials Engr
LERC/S R LEVINE

NAG 3-1149 Case Western Reserve University 6483
THE DEVELOPMENT OF SOLID STATE HYDROGEN AND OXYGEN SENSORS FOR ROCKET ENGINE LEAKAGE DETECTION
Period Obligations
03/06/1990-12/31/1994 FY94: \$50,000 TOTAL: \$185,000
Prin Invest NASA Tech Officer CASE Category
C C LIU LERC/G C MADZSAR 99-Multi-Discip

NAG 3-1179 Case Western Reserve University 6484
STABILITY OF FLOW THROUGH AXIAL COMPRESSION SYSTEMS
Period Obligations
05/24/1990-12/06/1994 FY94: \$114,677 TOTAL: \$290,204
Prin Invest NASA Tech Officer CASE Category
F E MCCAUGHAN LERC/F A NEWMAN 41-Aero Engr

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAG 3-1201 Case Western Reserve University 6485
TIME DEPENDENT NUMERICAL SIMULATIONS OF SOLIDIFICATION PROCESSES

<i>Period</i>	<i>Obligations</i>	
08/21/1990-12/31/1994	FY94: \$73,684	TOTAL: \$237,801
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P L TAYLOR	LERC/A CHAIT	13-Physics
	LERC/T K GLASGOW	

NAG 3-1212 Case Western Reserve University 6486
MODELING OF DIFFUSION FLAMES AT LOW STRETCH RATES

<i>Period</i>	<i>Obligations</i>	
10/18/1990-02/21/1994	FY94: \$0	TOTAL: \$77,109
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J S TIEN	LERC/H D ROSS	46-Mech Engr

NAG 3-1232 Case Western Reserve University 6487
FEEDBACK LINEARIZATION FOR CONTROL OF AIR BREATHING ENGINES

<i>Period</i>	<i>Obligations</i>	
12/21/1990-04/10/1995	FY94: \$40,000	TOTAL: \$153,630
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S M PHILLIPS	LERC/C F LORENZO	41-Aero Engr

NAG 3-1273 Case Western Reserve University 6488
MICROFABRICATED SHEAR STRESS SENSORS

<i>Period</i>	<i>Obligations</i>	
04/26/1991-02/02/1995	FY94: \$144,637	TOTAL: \$313,096
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M MEHREGANY	LERC/W R HINGST	41-Aero Engr
R L MULLEN	LERC/B P WILLIS	

NAG 3-1282 Case Western Reserve University 6489
ELECTROCAT, SUPPORT AND ELECTRODE STRUCTURE FOR O₂ ELECTRODES FOR SOLID POLYMER ELECTROLYTE REGEN FUEL CELL

<i>Period</i>	<i>Obligations</i>	
05/23/1991-11/30/1992	FY94: \$0	TOTAL: \$40,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G KLOPMAN	LERC/R S BALDWIN	12-Chemistry
E B YEAGER	LERC/J SINGER	
D A TRYK		

NAG 3-1303 Case Western Reserve University 6490
SEQUENTIAL LOADING AT HIGH TEMPERATURE-CREEP AND CREEP-FATIGUE

<i>Period</i>	<i>Obligations</i>	
10/29/1991-06/30/1995	FY94: \$24,912	TOTAL: \$134,790
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S S MANSON	LERC/G R HALFORD	49-Engr, NEC
	LERC/M A MCGAW	

NAG 3-1337 Case Western Reserve University 6491
INLET FLOW MODELING

<i>Period</i>	<i>Obligations</i>	
03/19/1992-08/31/1993	FY94: \$0	TOTAL: \$67,653
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F E MCCAUGHAN	LERC/C K DRUMMOND	41-Aero Engr

NAG 3-1362 Case Western Reserve University 6492
MEASUREMENT OF CENTERING AND ROTORDYNAMIC COEFFICIENTS FOR AIR-LUBRICATED HYDRODYNAMIC JOURNAL BEARINGS

<i>Period</i>	<i>Obligations</i>	
07/29/1992-12/31/1993	FY94: \$0	TOTAL: \$75,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M L ADAMS	LERC/W A WONG	49-Engr, NEC
	LERC/J G SCHREIBER	

NAG 3-1363 Case Western Reserve University 6493
EXTRAPOLATION OF CREEP RUPTURE DATA BY MULTIHEAT ANALADOPTION

<i>Period</i>	<i>Obligations</i>	
08/26/1992-08/31/1993	FY94: \$0	TOTAL: \$69,859
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S S MANSON	LERC/G R HALFORD	49-Engr, NEC

NAG 3-1412 Case Western Reserve University 6494
DIRECTIONAL SOLIDIFICATION IN 3HE-4HE ALLOYS

<i>Period</i>	<i>Obligations</i>	
12/30/1992-12/31/1995	FY94: \$75,000	TOTAL: \$150,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A J DAHM	LERC/A CHAIT	47-Materials Engr
	LERC/V PINES	

NAG 3-1438 Case Western Reserve University 6495
DEVELOPMENT OF NOVEL THIN-FILM HEAT FLUX SENSORS

<i>Period</i>	<i>Obligations</i>	
01/12/1993-12/31/1993	FY94:	TOTAL: \$91,051
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M TABIB-AZAR	LERC/G C FRALICK	46-Mech Engr

NAG 3-1473 Case Western Reserve University 6496
DEVELOPMENT OF INTEGRATED OPTIC SENSORS FOR AIRCRAFT CONTROL SYSTEMS

<i>Period</i>	<i>Obligations</i>	
03/02/1993-11/02/1994	FY94: \$0	TOTAL: \$19,266
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M TABIB-AZAR	LERC/G BEHEIM	45-Elec Engr

NAG 3-1478 Case Western Reserve University 6497
CHARACTERIZATION OF GALLIUM ARSENIDE MATERIAL FROM GALLIUM ARSENIDE/GET AWAY SPECIAL FLIGHT PROJECT

<i>Period</i>	<i>Obligations</i>	
04/01/1993-03/29/1995	FY94: \$0	TOTAL: \$160,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D H MATTHIESEN	LERC/R W LAUVER	19-Phys Sci, NEC

NAG 3-1495 Case Western Reserve University 6498
SUMMER 1993 STUDENT TECHNOLOGY EVALUATION PROGRAM (STEP)

<i>Period</i>	<i>Obligations</i>	
04/29/1993-12/06/1994	FY94: \$0	TOTAL: \$80,020
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R M MASON	LERC/K A VARIS	99-Multi-Discip
S CORT	LERC/A F RATAJCZAK	
C L RAHN		

NAG 3-1525 Case Western Reserve University 6499
THEORETICAL STUDY OF ELECTRONIC STRUCTURE AND WORK FUNCTION OF A MODEL DISPENSER CATHODE SURFACE

<i>Period</i>	<i>Obligations</i>	
09/09/1993-02/28/1995	FY94: \$0	TOTAL: \$20,814
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B SEGALL	LERC/I L KRANSKY	13-Physics
W R LAMBRECHT		
A G PETUKHOV		

NAG 3-1538 Case Western Reserve University 6500
GRAVITY-DEPENDENT TRANSPORT PHENOMENA IN ZEOLITE CRYSTAL GROWTH

<i>Period</i>	<i>Obligations</i>	
09/28/1993-05/14/1994	FY94: \$0	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S OSTRACH	LERC/R L THOMPSON	47-Materials Engr
Y KAMOTARI		

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAG 3-1541 Case Western Reserve University 6501
 ANALYTICAL AND NUMERICAL ANALYSIS OF EJECTOR NOZZLE FLOWS
Period *Obligations*
 09/28/1993-09/27/1994 FY94: \$39,660 TOTAL: \$52,880
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 I GREEBER LERC/J K LYTLE 41-Aero Engr

NAG 3-1568 Case Western Reserve University 6502
 SURFACE TENSION DRIVEN CONVECTION EXPERIMENTS - 2
Period *Obligations*
 02/14/1994-02/13/1995 FY94: \$262,367 TOTAL: \$262,367
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S OSTRACH LERC/A D PLINE 19-Phys Sci, NEC
 Y KAMOTANI

NAG 5-1451 Case Western Reserve University 6503
 HIGH ENERGY SOLAR FLARE DATA FROM OSSE/BATSE
Period *Obligations*
 08/27/1990-08/31/1993 FY94: \$0 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G M FRYE GSFC/J P NORRIS 11-Astronomy
 T L JENKINS GSFC/D A KNIFFEN

NAG 5-2559 Case Western Reserve University 6504
 MICROMACHINED TUNABLE ETALONS AND ETALON ARRAYS
Period *Obligations*
 03/24/1994-03/31/1995 FY94: \$37,000 TOTAL: \$37,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M MEHREGANY GSFC/D DEMING 11-Astronomy
 GSFC/D REUTER

NAG 9-571 Case Western Reserve University 6505
 QUANTITATION OF HEAD AND GAZE STABILITY DURING NATURAL ACTIVITIES IN EARTH GRAVITY
Period *Obligations*
 01/28/1992-08/01/1995 FY94: \$20,000 TOTAL: \$99,100
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R J LEIGH JSC/D L HARM 51-Biological Sci

NAGW 1193 Case Western Reserve University 6506
 CENTER FOR THE COMMERCIALIZATION OF SPACE
Period *Obligations*
 10/19/1987-10/31/1994 FY94: \$907,585 TOTAL: \$7,323,771
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J F WALLACE HQ/W A ORAN 99-Multi-Discip
 E BAER HQ/A VILLAMIL

NAS 3-25973 Case Western Reserve University 6507
 THERMOCAPILLARY CONVECTION EXPERIMENT IN MICROGRAVITY
Period *Obligations*
 04/15/1991-05/01/1995 FY94: \$126,796 TOTAL: \$1,256,476
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S OSTRACH LERC/A D PLINE 49-Engr, NEC
 Y KAMOTANI

NAS 3-26054 Case Western Reserve University 6508
 COST REIMBURSEMENT (TASK ORDER) CONTRACT FOR SYMPO SIA AND REPORTS IN ELECTRO-PHYSICS
Period *Obligations*
 06/06/1990-06/05/1995 FY94: \$50,726 TOTAL: \$228,737
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B SEGEL LERC/B BANKS 13-Physics
 LERC/J DEVON

NAS 8-39695 Case Western Reserve University 6509
 FLIGHT EXPERIMENT
Period *Obligations*
 10/19/1992-01/31/1994 FY94: \$0 TOTAL: \$188,393
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D MATTHIESEN MSFC/L JETER 99-Multi-Discip

NAS 8-39722 Case Western Reserve University 6510
 STUDY OF DOPART SEGREGATION
Period *Obligations*
 04/30/1993-12/31/1996 FY94: \$370,000 TOTAL: \$470,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D MATTHIESEN MSFC/L JETER 99-Multi-Discip

NCC 3-25 Case Western Reserve University 6511
 THEORETICAL STUDIES OF THE TRANSPORT PROPERTIES IN SELECTIVITY DOPES III-V SEMICONDUCTING HETERO STR
Period *Obligations*
 02/16/1983-04/17/1994 FY94: TOTAL: \$257,931
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B SEGALL LERC/E HAUGLAND 13-Physics
 LERC/S A ALTEROVITZ

NCC 3-30 Case Western Reserve University 6512
 TRANSIENT ELASTOHYDRODYNAMIC LUBRICATION IN STARVED CONJUNCTIONS
Period *Obligations*
 05/09/1983-02/03/1995 FY94: \$203,667 TOTAL: \$1,572,008
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J M PRAHL LERC/S V PEPPER 46-Mech Engr
 J R JENG LERC/C DELLACORTE

NCC 3-73 Case Western Reserve University 6513
 THEOR. AND EXPMTL. INV. OF PYROLITIC COATINGS OF MAT ERIALS BY CHEMICAL VAPOR DEPOSITION
Period *Obligations*
 11/17/1986-07/05/1993 FY94: \$5 TOTAL: \$791,005
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P PIROUZ LERC/C A STEARNS 19-Phys Sci, NEC
 S GOKOGLU LERC/D R BEHRENDT

NCC 3-85 Case Western Reserve University 6514
 ABSOLUTE IGN DELOY X'S FOR HYDR-OXY COMB FROM MEASUREMENTS MODE NEAR THE END WALL OF A SHOCK TABLE
Period *Obligations*
 05/22/1987-12/31/1993 FY94: \$0 TOTAL: \$306,671
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J M PRAHL LARC/M J RABINOWITZ 12-Chemistry
 LERC/E A LEZBERG

NCC 3-90 Case Western Reserve University 6515
 DEVELOPING ONGOING EVAL TO SUPPORT PLANNED CHANGE
Period *Obligations*
 07/01/1987-09/21/1994 FY94: \$0 TOTAL: \$144,399
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D A KOLB LERC/R L REAMES 79-Soc Sci, NEC

NCC 3-94 Case Western Reserve University 6516
 INCR THERMAL FATIGUE RESIST OF COPER BASED ALLOYS
Period *Obligations*
 07/24/1987-01/12/1995 FY94: \$103,935 TOTAL: \$533,535
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G M MICHAL LERC/H R GRAY 47-Materials Engr
 D L ELLIS

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NCC 3-99 Case Western Reserve University 6517				NCC 3-152 Case Western Reserve University 6525			
HI FREQ WIDE BAND OPTICAL COMMUN				POLYDIACETYLENE LANGMUIR BLODGETT FILMS FOR ELECTRONIC APPLICATIONS			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
12/09/1987-07/12/1993		FY94: TOTAL: \$150,640		11/05/1989-10/31/1993		FY94: \$0 TOTAL: \$57,933	
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P C CLASPY	LERC/K B BHASIN	45-Elec Engr		J B LANDO	LERC/C H UANG	12-Chemistry	
	LERC/R F LEONARD						
NCC 3-112 Case Western Reserve University 6518				NCC 3-166 Case Western Reserve University 6526			
SYNTHESIS AND PROCESSING OF ADV. POLYMER SYSTEMS SAME				EVALUATION OF LASER-LIGHT SCATTERING HARDWARE FOR MICRO-GRAVITY EXPERIMENTS			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
06/25/1988-11/30/1994		FY94: \$126,974 TOTAL: \$1,057,595		03/06/1990-05/04/1995		FY94: \$101,181 TOTAL: \$384,824	
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C N JUKENIK	LERC/M A MEADOR	12-Chemistry		J A MANN	LERC/T K GLASGOW	47-Materials Engr	
	LERC/J K SUTTER						
NCC 3-118 Case Western Reserve University 6519				NCC 3-170 Case Western Reserve University 6527			
MOCVD DEPOSITION OF PHOTOVOLTAIC MATERIALS				A RESEARCH PROJECT ON LASER LIGHT SCATTERING			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
10/24/1988-09/30/1993		FY94: TOTAL: \$299,124		03/16/1990-10/14/1993		FY94: TOTAL: \$231,086	
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R W HOFFMAN	LERC/I WEINBERG	13-Physics		J F WALLACE	LERC/T K GLASGOW	47-Materials Engr	
	LERC/D J FLOOD						
NCC 3-124 Case Western Reserve University 6520				NCC 3-206 Case Western Reserve University 6528			
ENVIRONMENTAL EFFECTS ON TRANSITION AND THE CONTROL OF TRANSITION				IGNITION AND FLAME SPREAD OF LIQUID FUEL POOLS			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
12/21/1988-06/27/1995		FY94: \$68,830 TOTAL: \$894,241		02/14/1991-03/31/1995		FY94: \$90,000 TOTAL: \$423,189	
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E RESHOTKO	LERC/L A POVINELLI	41-Aero Engr		J S TIEN	LERC/H D ROSS	46-Mech Engr	
NCC 3-139 Case Western Reserve University 6521				NCC 3-236 Case Western Reserve University 6529			
CERAMIC PROCESSING				MICROSTRUCTURAL CHARACTERIZATION OF METAL MATRIX COMPOSITES (MMS'S), INTERMETALLIC MATRIX COMPOS (IMS)			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
05/08/1989-11/04/1994		FY94: \$388,600 TOTAL: \$682,936		11/22/1991-01/30/1995		FY94: \$96,992 TOTAL: \$282,917	
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W S WILLIAMS	LERC/S R LEVINE	47-Materials Engr		K P LAGERLOF	LERC/D R HULL	47-Materials Engr	
J CAWLEY					LERC/R L DAVIES		
NCC 3-140 Case Western Reserve University 6522				NCC 3-244 Case Western Reserve University 6530			
THERMOCAPILLARY AND ELECTROCAPILLARY EFFECTS IN REDUCED GRAVITY				A STUDY OF THE MECHANICAL PROPERTIES OF MG AND TI CO-DOPED SAPPHIRE FIBERS			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
05/15/1989-05/22/1995		FY94: \$346,256 TOTAL: \$1,754,283		01/02/1992-11/20/1994		FY94: \$259,369 TOTAL: \$648,255	
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
Y KAMOTANI	LERC/R W VERNON	46-Mech Engr		K D LAGERLOFF	LERC/J A DICARLO	47-Materials Engr	
					LERC/S R LEVINE		
NCC 3-141 Case Western Reserve University 6523				NCC 3-250 Case Western Reserve University 6531			
OXYGEN INTERACTION WITH SPACE-POWER MATERIALS				NUMERICAL MODEL FOR PROGRAMMABLE MULTIZONE FURNACE			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
05/22/1989-01/12/1995		FY94: \$0 TOTAL: \$456,785		02/07/1992-06/30/1994		FY94: \$0 TOTAL: \$47,097	
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T G ECK	LERC/D C FERGUSON	13-Physics		J J LEWANDOWSKI	LERC/T K GLASGOW	47-Materials Engr	
R W HOFFMAN	LERC/C K PURVIS						
NCC 3-144 Case Western Reserve University 6524				NCC 3-253 Case Western Reserve University 6532			
DEVELOPMENT OF NIA1-BASED ALLOYS AND COMPOSITE MATERIALS FOR ELEVATED TEMPERATURE USE				DEVELOPMENT OF A SIC MICROSENSOR TECHNOLOGY			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
07/07/1989-12/01/1994		FY94: \$201,869 TOTAL: \$781,530		02/19/1992-01/04/1995		FY94: \$75,000 TOTAL: \$200,000	
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G M MICHAL	LERC/H R GRAY	47-Materials Engr		M MEHREGANY	LERC/L G MATUS	45-Elec Engr	

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NCC 3-254 Case Western Reserve University 6533
 AN EXAMINATION OF SORET AND FICKIAN DIFFUSION AND THEIR
 RELATIONSHIP TO MATERIALS PROCESSING
Period Obligations
 02/21/1992-12/31/1993 FY94: \$0 TOTAL: \$110,833
Prin. Invest. NASA Tech. Officer CASE Category
 W S WILLIAMS LERC/T K GLASGOW 47-Materials Engr

NCC 3-258 Case Western Reserve University 6534
 STUDY OF ELECTRICAL PHENOMENA ASSOCIATED WITH THIN
 FILMS
Period Obligations
 03/06/1992-12/15/1992 FY94: TOTAL: \$38,694
Prin. Invest. NASA Tech. Officer CASE Category
 W L GORDON LERC/I L KRAINSKY 13-Physics

NCC 3-259 Case Western Reserve University 6535
 ELECTRON-BEAM ASSISTED FABRICATION OF A Si3N4/SiO2 /Si
 MACH-ZENDER INTERFEROMETER
Period Obligations
 03/19/1992-12/31/1992 FY94: TOTAL: \$7,263
Prin. Invest. NASA Tech. Officer CASE Category
 M J AZAR LERC/G BEHEIM 45-Elec Engr

NCC 3-263 Case Western Reserve University 6536
 FLOW VISUALIZATION OF BLADE ROW INTERACTION
Period Obligations
 05/08/1992-05/03/1995 FY94: \$31,256 TOTAL: \$83,256
Prin. Invest. NASA Tech. Officer CASE Category
 J R KADAMBF LERC/J J ADAMCZYK 41-Aero Engr
 LERC/R J BOYLE

NCC 3-264 Case Western Reserve University 6537
 AN APPLICATION FOR THE STEREO IMAGING VELOCIMETRY
 PROJECT
Period Obligations
 05/08/1992-06/30/1993 FY94: \$0 TOTAL: \$9,362
Prin. Invest. NASA Tech. Officer CASE Category
 K VADAPARTY LERC/M D BETHEA 22-Computer Science
 LERC/M B MEYER

NCC 3-266 Case Western Reserve University 6538
 SURFACE LIGHT SCATTERING INSTRUMENT
Period Obligations
 05/19/1992-07/21/1995 FY94: \$67,000 TOTAL: \$201,000
Prin. Invest. NASA Tech. Officer CASE Category
 J A MANN LERC/T K GLASGOW 47-Materials Engr
 LERC/W V MEYER

NCC 3-269 Case Western Reserve University 6539
 SURFACE LIGHT SCATTERING INSTRUMENTATION FOR MICRO
 GRAVITY EXPERIMENTS
Period Obligations
 06/02/1992-07/12/1995 FY94: \$95,800 TOTAL: \$272,801
Prin. Invest. NASA Tech. Officer CASE Category
 J A MANN LERC/T K GLASGOW 47-Materials Engr

NCC 3-275 Case Western Reserve University 6540
 NUMERICAL STUDIES OF PHASE TRANSITION PHENOMENA IN
 MICROGRAVITY
Period Obligations
 07/02/1992-12/31/1994 FY94: \$93,088 TOTAL: \$215,806
Prin. Invest. NASA Tech. Officer CASE Category
 V K PINES LERC/A CHAIT 47-Materials Engr

NCC 3-278 Case Western Reserve University 6541
 MOTOR CHARACTERIZATION AND CONTROL FOR INERTIAL BAL-
 NCING
Period Obligations
 10/07/1992-06/30/1995 FY94: \$7,320 TOTAL: \$40,738
Prin. Invest. NASA Tech. Officer CASE Category
 W NEWMAN LERC/C LAWRENCE 46-Mech Engr

NCC 3-280 Case Western Reserve University 6542
 SEAL PERFORMANCE EVALUATION FOR ADVANCED HIGH TEMP
 ERATURE ENGINE APPLICATIONS
Period Obligations
 10/07/1992-10/24/1994 FY94: \$48,267 TOTAL: \$93,651
Prin. Invest. NASA Tech. Officer CASE Category
 J PRAHL LERC/B M STEINETZ 46-Mech Engr
 L KREN LERC/D A ROHN

NCC 3-292 Case Western Reserve University 6543
 SOFTWARE DEVELOPMENT FOR THE STEREO VELOCIMETRY PR
 OJECT
Period Obligations
 01/11/1993-09/25/1994 FY94: \$16,000 TOTAL: \$39,688
Prin. Invest. NASA Tech. Officer CASE Category
 F I MERAT LERC/M D BETHEA 47-Materials Engr

NCC 3-293 Case Western Reserve University 6544
 DIFFUSION PROCESSES IN MOLTEN SEMICONDUCTORS
Period Obligations
 01/13/1993-02/10/1995 FY94: \$122,300 TOTAL: \$244,600
Prin. Invest. NASA Tech. Officer CASE Category
 D MATTHIESEN LERC/T K GLASGOW 47-Materials Engr
 LERC/C R KROLIKOWSKI

NCC 3-294 Case Western Reserve University 6545
 ELECTRICAL CHARACTERIZATION OF SIC ELECTRIC DEVICES
Period Obligations
 01/25/1993-01/12/1995 FY94: \$34,249 TOTAL: \$64,249
Prin. Invest. NASA Tech. Officer CASE Category
 M TABIB-AZAR LERC/P G NEUDECK 45-Elec Engr

NCC 3-295 Case Western Reserve University 6546
 INTERMETALLIC MATRIX COMPOSITES
Period Obligations
 02/10/1993-03/13/1995 FY94: \$44,420 TOTAL: \$84,777
Prin. Invest. NASA Tech. Officer CASE Category
 R M AIKEN LERC/M V NATHAL 47-Materials Engr
 J J LEWANDOSKI

NCC 3-296 Case Western Reserve University 6547
 EXPOSURE OF MATERIALS IN SPACE FLIGHT
Period Obligations
 01/22/1993-10/31/1994 FY94: \$0 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
 J F WALLACE LERC/K K DE GROH 47-Materials Engr
 J H PAYER LERC/B A BANKS

NCC 3-298 Case Western Reserve University 6548
 COLLOIDAL PROCESSING STRATEGIES FOR FIBER-REINFORCED
 CERAMIC COMPOSITES
Period Obligations
 02/24/1993-10/13/1994 FY94: \$44,802 TOTAL: \$353,769
Prin. Invest. NASA Tech. Officer CASE Category
 D L FEKE LERC/R T BHATT 47-Materials Engr
 LERC/S R LEVINE

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NCC 3-313 Case Western Reserve University 6549			
CAMERA CALIBRATION FOR STEREO IMAGING VELOCIMETRY			
<i>Period</i>	<i>Obligations</i>		
05/26/1993-12/31/1993	FY94: \$0	TOTAL: \$12,841	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
F L MERAT	LERC/M BETHEA	47-Materials Engr	
NGT 00-050-588 Case Western Reserve University 6557			
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/26/1990-08/31/1994	FY94: \$0	TOTAL: \$88,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R D QUINN	HQ/F C OWENS	46-Mech Engr	
NCC 3-322 Case Western Reserve University 6550			
MATERIALS EXPOSURE IN THE SPACE ENVIRONMENT			
<i>Period</i>	<i>Obligations</i>		
09/28/1993-09/26/1994	FY94: \$0	TOTAL: \$25,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E BAER	LERC/J K SUTTER	43-Chem Engr	
D DAVIS			
NGT 00-050-632 Case Western Reserve University 6558			
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/17/1990-07/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G M MICHAL	HQ/F C OWENS	47-Materials Engr	
NCC 3-331 Case Western Reserve University 6551			
FATIGUE CRACK GROWTH OF ADVANCED MATERIALS			
<i>Period</i>	<i>Obligations</i>		
11/29/1993-12/31/1994	FY94: \$106,934	TOTAL: \$106,934	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R L MULLEN	LERC/J I TELESMA	46-Mech Engr	
L T GHOSH			
NGT 00-050-862 Case Western Reserve University 6559			
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/30/1991-06/30/1995	FY94: \$22,000	TOTAL: \$88,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J S T'EN	HQ/F C OWENS	46-Mech Engr	
NCC 3-337 Case Western Reserve University 6552			
MODELING OF DIFFUSION FLAMES AT LOW STRETCH RATES			
<i>Period</i>	<i>Obligations</i>		
02/22/1994-02/21/1995	FY94: \$15,000	TOTAL: \$15,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J S T'EN	LERC/H D ROSS	46-Mech Engr	
	LERC/S L OLSON		
NGT 00-050-947 Case Western Reserve University 6560			
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/11/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
K D SINGER	LERC/F MONTEGANI	13-Physics	
NCC 3-340 Case Western Reserve University 6553			
SOFTWARE ENGINEERING FOR STEREO IMAGING VELOCIMETRY			
<i>Period</i>	<i>Obligations</i>		
03/04/1994-10/03/1994	FY94: \$8,540	TOTAL: \$8,540	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G W ERNST	LERC/M D BETHEA	22-Computer Science	
NGT 00-050-948 Case Western Reserve University 6561			
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/14/1992-06/23/1994	FY94: \$0	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
F E MCCAUGHAN	LERC/F MONTEGANI	46-Mech Engr	
NCC 3-352 Case Western Reserve University 6554			
EFFECT OF GROWTH PARAMETERS ON SECONDARY ELECTRON YIELD OF DIAMOND FILMS			
<i>Period</i>	<i>Obligations</i>		
06/13/1994-06/12/1995	FY94: \$29,753	TOTAL: \$29,753	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
Y WANG	LERC/I L KRAINSLEY	47-Materials Engr	
J C ANGUS			
NGT 00-051-041 Case Western Reserve University 6562			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
05/14/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G KLOPMAN	JPL/C HIX	12-Chemistry	
NGT 00-051-087 Case Western Reserve University 6563			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
06/15/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J S TIEN	HQ/D A HOLLAND	46-Mech Engr	
NCCW 36 Case Western Reserve University 6555			
CONTROLLED CROSS CONTAMINATION 2/1/94 NEW AWARD			
<i>Period</i>	<i>Obligations</i>		
02/23/1994-01/31/1995	FY94: \$97,446	TOTAL: \$97,446	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R PRIBISICH	HQ/A DOUGHERTY	19-Phys Sci, NEC	
NGT 00-051-143 Case Western Reserve University 6564			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/23/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
F E MCCLAUGHAN	HQ/G LESANE	46-Mech Engr	
NGT 00-050-375 Case Western Reserve University 6556			
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/01/1988-07/31/1993	FY94: \$54,677	TOTAL: \$54,677	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W YOUNGS	HQ/F C OWENS	12-Chemistry	
C T YOUNGS			
NGT 00-051-168 Case Western Reserve University 6565			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/06/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
V KAMOTANI	LERC/F MONTEGANI	46-Mech Engr	

**NASA'S UNIVERSITY PROGRAM
OHIO (Continued)**

NGT 00-051-194 Case Western Reserve University 6566
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/20/1993-08/22/1996 FY94: \$22,000 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
R D QUINN MSFC/B SWINFORD 46-Mech Engr

NAG 3-1517 Central State University - Ohio 6574
RESEARCH LABORATORY FOR ENGINEERING AND TECHNOLOGY (RELENT)
Period Obligations
08/19/1993-08/07/1995 FY94: \$200,000 TOTAL: \$304,155
Pnn. Invest. NASA Tech. Officer CASE Category
C B OKHIO LERC/D E LACY 42-Astro Engr

NGT 00-051-357 Case Western Reserve University 6567
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
D H MATTHIESEN HQ/G A LESANE 47-Materials Engr

NAG 3-1554 Central State University - Ohio 6575
CLIENT/SERVER STUDY
Period Obligations
12/17/1993-12/16/1994 FY94: \$249,991 TOTAL: \$249,991
Pnn. Invest. NASA Tech. Officer CASE Category
K DEZHGOSSHA LERC/J J PELOUCH 22-Computer Science

NGT 00-051-361 Case Western Reserve University 6568
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
D MATTHIESEN HQ/G A LESANE 47-Materials Engr

NAG 3-1670 Central State University - Ohio 6576
RESEARCH FACILITY TO STUDY FLOWS THROUGH ANNULAR D
IFFUSRS
Period Obligations
09/28/1994-11/27/1994 FY94: \$69,240 TOTAL: \$69,240
Pnn. Invest. NASA Tech. Officer CASE Category
C B OKHIO LERC/R R TACINA 41-Aero Engr

NGT 00-070-237 Case Western Reserve University 6569
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
12/17/1991-12/31/1994 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. NASA Tech. Officer CASE Category
T G ECK LARC/E PRIOR 13-Physics

NAGW 4077 Central State University - Ohio 6577
EARTH TO LOS ANGELES
Period Obligations
07/08/1994-05/31/1995 FY94: \$318,665 TOTAL: \$318,665
Pnn. Invest. NASA Tech. Officer CASE Category
D J LOVE HQ/B L WHITE 39-Env Sci, NEC

NGT 00-070-281 Case Western Reserve University 6570
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
07/24/1992-12/31/1994 FY94: \$0 TOTAL: \$44,000
Pnn. Invest. NASA Tech. Officer CASE Category
D SCHERSON LERC/F J MONTEGANI 12-Chemistry

NAG 3-658 Cleveland State University 6578
THEORY OF INDIUM PHOSPHIDE SOLAR CELLS
Period Obligations
11/06/1985-12/31/1994 FY94: \$95,837 TOTAL: \$1,709,701
Pnn. Invest. NASA Tech. Officer CASE Category
C GORADIA LERC/I WEINBERG 45-Elec Engr
M GORADIA LERC/D J FLOOD

NGT 00-070-351 Case Western Reserve University 6571
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
08/12/1993-12/31/1994 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. NASA Tech. Officer CASE Category
S PHILLIPS HQ/D K RUSSELL 45-Elec Engr

NAG 3-749 Cleveland State University 6579
A HIGH TEMP. TESTING SYS. FOR CERAMIC COMPOSITES
Period Obligations
10/29/1986-10/27/1994 FY94: \$127,355 TOTAL: \$748,479
Pnn. Invest. NASA Tech. Officer CASE Category
J H HEMANN LERC/F I HURWITZ 47-Materials Engr

NGT 00-090-177 Case Western Reserve University 6572
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Pnn. Invest. NASA Tech. Officer CASE Category
M BOULDING HQ/D RUSSELL 99-Multi-Discip

NAG 3-879 Cleveland State University 6580
ADAPT OF CERAMICS ANALY AND RELIAB EVAL OF STRUCT (C
ARES) AND THE COMPOSITE VERSION C/CARES TO ANSYS
Period Obligations
02/24/1988-04/26/1994 FY94: \$11,975 TOTAL: \$114,875
Pnn. Invest. NASA Tech. Officer CASE Category
A PINTZ LERC/J M MANDERSCHIED 46-Mech Engr

NAG 3-1463 Central State University - Ohio 6573
A STUDY OF EVAPORATION FROM A BINARY MENICUS IN M
ICROGRAVITY
Period Obligations
03/04/1993-05/31/1995 FY94: \$174,899 TOTAL: \$323,480
Pnn. Invest. NASA Tech. Officer CASE Category
M M GIRGIS LERC/J A SALZMAN 19-Phys Sci, NEC
LERC/R L THOMPSON

NAG 3-955 Cleveland State University 6581
DEVELOPMENT OF MULTI-DIMENSIONAL STERLING ENGINE D
ESIGN CODE
Period Obligations
11/15/1988-12/31/1994 FY94: \$0 TOTAL: \$222,631
Pnn. Invest. NASA Tech. Officer CASE Category
M B IBRAHIM LERC/R C TEW 49-Engr, NEC
LERC/J E DUDENHOEFER

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAG 3-1010			Cleveland State University	6582
FLOW VISUALIZATION STUDIES OF MIXING PROCESS				
<i>Period</i>		<i>Obligations</i>		
02/13/1989-09/30/1994	FY94: \$0	TOTAL: \$325,898		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
B GHORASHI	LERC/K S CHUN	41-Aero Engr		
NAG 3-1151			Cleveland State University	6583
ANALYZING A SELF-DIAGNOSTIC SYSTEM FOR PIEZOELECTRIC SENSORS				
<i>Period</i>		<i>Obligations</i>		
03/06/1990-11/15/1993	FY94: \$0	TOTAL: \$139,900		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
P M FLANAGAN	LERC/G C MADZSAR	49-Engr, NEC		
W J ATHERTON				
NAG 3-1191			Cleveland State University	6584
MATHEMATICAL MODELING OF A SPLIT TORQUE HELICOPTER TRANSMISSION				
<i>Period</i>		<i>Obligations</i>		
07/05/1990-03/24/1994	FY94: \$0	TOTAL: \$114,331		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M RASHIDI	LERC/T L KRANTZ	46-Mech Engr		
NAG 3-1216			Cleveland State University	6585
A STUDY OF TIME DEPENDENT RESPONSE OF CERAMIC MATERIALS				
<i>Period</i>		<i>Obligations</i>		
12/05/1990-12/26/1994	FY94: \$78,670	TOTAL: \$294,750		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J H HEMANN	LERC/J P GYEKENYESI	42-Astro Engr		
	LERC/J M MANDERSCHIED			
NAG 3-1313			Cleveland State University	6586
CHARACTERIZATION OF DEFECT SOLIDS				
<i>Period</i>		<i>Obligations</i>		
12/17/1991-12/31/1994	FY94: \$25,000	TOTAL: \$115,250		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
H SCHLOSSER	LERC/J FERRANTE	47-Materials Engr		
NAG 3-1379			Cleveland State University	6587
A RATE-ADJUSTING CONGESTION CONTROL SCHEME FOR SATELLITE PACKET SWITCHING NETWORK				
<i>Period</i>		<i>Obligations</i>		
11/04/1992-01/01/1995	FY94: \$0	TOTAL: \$83,837		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
P CHU	LERC/H KIM	45-Elec Engr		
NAG 3-1441			Cleveland State University	6588
DESIGN OF OBJECT-ORIENTED DISTRIBUTED SIMULATION CLASSES				
<i>Period</i>		<i>Obligations</i>		
01/13/1993-10/14/1994	FY94: \$0	TOTAL: \$73,461		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J SCHOEFFLER	LERC/G YOLKN	22-Computer Science		
NAG 3-1482			Cleveland State University	6589
RELIABILITY ANALYSIS OF SHUTTLE BASED MICROGRAVITY FLIGHT EXPERIMENTS				
<i>Period</i>		<i>Obligations</i>		
04/05/1993-11/30/1993	FY94: \$0	TOTAL: \$26,640		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
Y A LIU	LERC/D P MORILAK	29-Math/Computer, NEC		
NAG 3-1511			Cleveland State University	6590
MINORITY ENGINEERING PROGRAMS PIPELINE-A PROPOSAL TO INCREASE MIN STUD ENROLL AND RETENTION IN ENG				
<i>Period</i>		<i>Obligations</i>		
07/13/1993-11/07/1994	FY94: \$4,168	TOTAL: \$31,294		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
P C CHARITY	LERC/J E BOYD	99-Multi-Discip		
	LERC/J A CHARLESTON			
NAG 3-1531			Cleveland State University	6591
NEW WHITE THERMAL CONTROL COATINGS FOR ADVANCED SPACE STATION FREEDOM RADIATORS				
<i>Period</i>		<i>Obligations</i>		
09/21/1993-03/21/1995	FY94: \$0	TOTAL: \$4,963		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
P D HAMBOURGER	LERC/S K RUTLEDGE	13-Physics		
NAG 3-1543			Cleveland State University	6592
EXPERIMENTAL AND ANALYTICAL FATIGUE STUDIES OF POLYMER MATRIX COMPOSITES				
<i>Period</i>		<i>Obligations</i>		
10/18/1993-10/22/1994	FY94: \$68,297	TOTAL: \$68,297		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J H HEMANN	LERC/J R ELLIS	44-Civil Engr		
NAG 3-1560			Cleveland State University	6593
DEVELOPMENT OF EXPERT SYSTEM TOOLS FOR NPSS ENGINE DIAGNOSTICS				
<i>Period</i>		<i>Obligations</i>		
01/05/1994-07/05/1994	FY94: \$33,246	TOTAL: \$33,246		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
H LEWANDOSKI	LERC/G F FOLLEN	29-Math/Computer, NEC		
NAG 3-1593			Cleveland State University	6594
RELIABILITY ANALYSIS OF SHUTTLE BASED MICROGRAVITY FLIGHT EXPERIMENTS				
<i>Period</i>		<i>Obligations</i>		
06/02/1994-12/31/1995	FY94: \$28,114	TOTAL: \$28,114		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
Y A LIU	LERC/D P MORILAK	29-Math/Computer, NEC		
NAG 3-1601			Cleveland State University	6595
WIRELESS INTERNET ACCESS USING SPREAD SPECTRUM TECHNOLOGY FOR K-12				
<i>Period</i>		<i>Obligations</i>		
07/01/1994-09/30/1994	FY94: \$44,873	TOTAL: \$44,873		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
C LIN	LERC/G MACKSON	29-Math/Computer, NEC		
	LERC/G FOLLEN			
NCC 3-19			Cleveland State University	6596
TERRESTRIAL SPACE ENERGETICS AND POWER SYSTEM				
<i>Period</i>		<i>Obligations</i>		
08/12/1982-09/30/1994	FY94: \$0	TOTAL: \$1,629,098		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
P D HAMBOURGER	LERC/S K RUTLEDGE	43-Chem Engr		
D B SHAH	LERC/B A BANKS			
NCC 3-23			Cleveland State University	6597
PHOSPHORIC ACID FUEL CELL TECHNOLOGY DEVELOPMENT				
<i>Period</i>		<i>Obligations</i>		
11/18/1982-03/31/1994	FY94: \$0	TOTAL: \$1,554,162		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
G COULMAN	LERC/P R PROKOPIUS	43-Chem Engr		
B ANTOINE	LERC/J M SMITH			
K ALKASAB				

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NCC 3-41 Cleveland State University 6598
 EXPERIMENTAL CAPABILITY FOR MICROGRAVITY MATERIAL SCIENCE
Period *Obligations*
 04/16/1984-06/30/1993 FY94: \$0 TOTAL: \$925,896
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G L KRAMERICH LERC/T K GLASGOW 29-Math/Computer, NEC
 LERC/B N ROSENTHAL

NCC 3-63 Cleveland State University 6599
 DEVELOPMENT OF CERAMIC COMPOSITES WITH ENHANCED RELIABILITY
Period *Obligations*
 04/18/1986-12/09/1994 FY94: \$159,537 TOTAL: \$1,219,871
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A H ANDRIST LERC/F I HURWITZ 43-Chem Engr

NCC 3-77 Cleveland State University 6600
 ADVANCED MICROSHEET/COMPOSITE SOLAR REFLECTOR FOR LEO APPLICATIONS
Period *Obligations*
 12/23/1986-09/26/1994 FY94: \$90,000 TOTAL: \$1,098,800
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A PINTZ LERC/J M SAVINO 47-Materials Engr
 LERC/T MROZ

NCC 3-81 Cleveland State University 6601
 INV. OF THEORIES OF FAILURE FOR CERAMIC COMPOSITE MATERIALS AND THEN IMPLEMENATATION INTO ELEMENT CODE
Period *Obligations*
 02/26/1987-11/24/1994 FY94: \$0 TOTAL: \$1,321,146
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J H HEMANN LERC/J P GYEKENYESI 47-Materials Engr
 LERC/B GROSS

NCC 3-111 Cleveland State University 6602
 MICROSTRUCTURAL AND MICROCHEMICAL CHARACTERIZATION OF ELEVATED TEMP
Period *Obligations*
 06/28/1988-04/28/1995 FY94: \$137,000 TOTAL: \$806,538
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N TEWARI LERC/D R HULL 41-Aero Engr

NCC 3-119 Cleveland State University 6603
 CREEP OF REFRACTORY METAL FIBERS AND MODELLING OF METAL MATRIX COMPOSITES
Period *Obligations*
 11/01/1988-03/14/1995 FY94: \$95,000 TOTAL: \$576,782
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N TEWARI LERC/H R GRAY 47-Materials Engr
 H M YUN LERC/T L GROBSTEIN

NCC 3-122 Cleveland State University 6604
 DEVELOPMENT OF ANALYTICAL METHODS FOR MATERIALS AN ANALYSIS
Period *Obligations*
 12/06/1988-11/30/1994 FY94: \$173,175 TOTAL: \$799,706
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R G MEGARGLE LERC/R L DAVIES 12-Chemistry
 R L TOWNS LERC/K S CRANDALL

NCC 3-138 Cleveland State University 6605
 HIGH TEMPERATURE MECHANICAL BEHAVIOR OF CERAMIC MA TRIX COMPOSITES
Period *Obligations*
 04/18/1989-07/14/1995 FY94: \$105,143 TOTAL: \$687,794
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J H HEMANN LERC/S R LEVINE 47-Materials Engr
 LERC/J A SALEM

NCC 3-142 Cleveland State University 6606
 INTERACTION BETWEEN CONVECTION AND HEAT TRANSFER IN CRYSTAL GROWTH
Period *Obligations*
 06/29/1989-12/16/1994 FY94: \$210,415 TOTAL: \$871,837
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N TEWARI LERC/M D BETHEA 47-Materials Engr
 LERC/B N ROSENTHAL

NCC 3-143 Cleveland State University 6607
 INNOVATIVE SOLAR CONCENTRATOR CONCEPTS RESEARCH
Period *Obligations*
 07/06/1989-09/30/1993 FY94: \$0 TOTAL: \$599,310
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P V HERMANN LERC/T MROZ 42-Astro Engr

NCC 3-162 Cleveland State University 6608
 SYNTHESIS AND CHARACTERIZATION OF ORGANOCOPPERINDIUM AND ORGANOCOPPERGALLIUM COMPOUNDS
Period *Obligations*
 01/23/1990-03/31/1994 FY94: \$0 TOTAL: \$63,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S A DURAJ LERC/A F HEPP 12-Chemistry

NCC 3-163 Cleveland State University 6609
 DEVELOPMENT OF ENGINEERING SYSTEMS FOR SPACE STATI ON FREEDOM
Period *Obligations*
 01/25/1990-09/30/1994 FY94: \$77,009 TOTAL: \$418,145
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G L KRAMERICH LERC/J A KOBAK 45-Elec Engr

NCC 3-190 Cleveland State University 6610
 DEVELOPMENT OF ADVANCED AEROSPACE MATERIALS /5100
Period *Obligations*
 01/02/1991-11/30/1994 FY94: \$0 TOTAL: \$208,376
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N TEWARI LERC/C E LOWELL 47-Materials Engr

NCC 3-191 Cleveland State University 6611
 DEVELOPMENT OF ADVANCED MULTIZONE FACILITIES FOR M ICROGRAVITY PROCESSING
Period *Obligations*
 12/12/1990-02/27/1995 FY94: \$69,998 TOTAL: \$586,197
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N TEWARI LERC/ 13-Physics
 LERC/T K GLASGOW

NCC 3-201 Cleveland State University 6612
 MODEM AND CODEC BOARD FOR LOW BIT RATE VSAT AT KABAN D
Period *Obligations*
 02/14/1991-04/30/1994 FY94: \$0 TOTAL: \$83,079
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D ZEGHLACHE LERC/M J CONROY 45-Elec Engr

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NCC 3-204 Cleveland State University 6613
 A FEAS STUDY OF A BACKSCATT ENSMB MEAS PARTICLE SI ZING
 INST FOR DET WATER DROPLET SIZE DIST W/ CLOU
Period Obligations
 02/14/1991-02/14/1995 FY94: \$35,000 TOTAL: \$126,697
Prin. Invest NASA Tech. Officer CASE Category
 J A LOCK LERC/R C ANDERSON 13-Physics
 LERC/D J LESCO

NCC 3-205 Cleveland State University 6614
 DURABILITY AND LIFE OF CERAMIC MATRIX COMPOSITES IN
 COMBUSTION ENVIRONMENT
Period Obligations
 06/11/1991-01/17/1995 FY94: \$93,300 TOTAL: \$320,881
Prin. Invest NASA Tech. Officer CASE Category
 S N TEWARI LERC/L A GREENBAUER-SENG 47-Materials Engr
 LERC/N S JACOBSON

NCC 3-228 Cleveland State University 6615
 SCANNING AND TRANSMISSION ELECTRON MICROSCOPY OF HIG
 H TEMPERATURE MATERIALS
Period Obligations
 08/14/1991-03/25/1995 FY94: \$94,448 TOTAL: \$325,866
Prin. Invest NASA Tech. Officer CASE Category
 S N TEWARI LERC/D R HULL 47-Materials Engr

NCC 3-242 Cleveland State University 6616
 SHAPE SELECTION CRITERION FOR CELLULAR ARRAY DURIN G
 CONSTRAINED GROWTH OF BINARY ALLOYS
Period Obligations
 12/04/1991-11/30/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest NASA Tech. Officer CASE Category
 S N TEWARI LERC/T K GLASGOW 47-Materials Engr

NCC 3-257 Cleveland State University 6617
 METHODOLOGY FOR THE DESIGN AND IMPLEMENTATION OF REA
 S-TIME EXPERT SYSTEMS
Period Obligations
 03/06/1992-06/17/1994 FY94: \$0 TOTAL: \$85,903
Prin. Invest NASA Tech. Officer CASE Category
 F E VILLASECA LERC/J C DELAAT 45-Elec Engr

NCC 3-285 Cleveland State University 6618
 PLASMA-SPRAYED REFRACTORY OXIDE COATINGS ON SILICO
 N-BASE CERAMICS
Period Obligations
 03/03/1993-02/28/1995 FY94: \$120,788 TOTAL: \$211,688
Prin. Invest NASA Tech. Officer CASE Category
 S N TEWARI LERC/L A GREENBAUER-SENG 47-Materials Engr

NCC 3-287 Cleveland State University 6619
 DIRECTIONAL SOLIDIFICATION OF INTERMETALLIC MATRIX
 COMPOSITES
Period Obligations
 02/12/1993-02/02/1995 FY94: \$0 TOTAL: \$60,000
Prin. Invest NASA Tech. Officer CASE Category
 S N TEWARI LERC/R R BOWMAN 47-Materials Engr

NCC 3-299 Cleveland State University 6620
 MACROSEGREGATION IN DIRECIONALY SOLIDIFIED PB-SN
 ALLOYS
Period Obligations
 05/27/1993-07/14/1995 FY94: \$69,289 TOTAL: \$135,639
Prin. Invest NASA Tech. Officer CASE Category
 S TEWARI LERC/A CHAIT 47-Materials Engr

NCC 3-301 Cleveland State University 6621
 IN-PLANT TESTING OF MEMBRANES TO TREAT ELECTROPLAT ING
 WASTEWATER
Period Obligations
 03/26/1993-12/07/1994 FY94: \$15,604 TOTAL: \$53,834
Prin. Invest NASA Tech. Officer CASE Category
 D B SHAH LERC/K W STREET 43-Chem Engr
 LERC/A F RATAJCZAK

NCC 3-303 Cleveland State University 6622
 AN INVESTIGATION OF DAMAGE IN SIC/TITANIUM COMPOSI TES
 USING THE SCANNING ACOUSTIC MICROSCOPE
Period Obligations
 05/05/1993-10/31/1994 FY94: \$0 TOTAL: \$23,535
Prin. Invest NASA Tech. Officer CASE Category
 J HEMANN LERC/G BAAKLINI 47-Materials Engr

NCC 3-304 Cleveland State University 6623
 ULTRASONIC SCANNER CONTROL AND DATA ACQUISITION
Period Obligations
 05/05/1993-12/31/1994 FY94: \$85,220 TOTAL: \$104,813
Prin. Invest NASA Tech. Officer CASE Category
 J HEMANN LERC/G Y BAAKLINI 47-Materials Engr

NCC 3-305 Cleveland State University 6624
 AN INVESTIGATION OF RELIABILITY MODELS FOR CERAMIC MATRIX
 COMP AND THEIR IMPL INTO FINITE ELEM CODES
Period Obligations
 06/29/1993-11/14/1994 FY94: \$70,410 TOTAL: \$118,201
Prin. Invest NASA Tech. Officer CASE Category
 S DUFFY LERC/N NEMETH 47-Materials Engr

NCC 3-306 Cleveland State University 6625
 AN INVESTIGATION OF THEORIES OF FAILURE FOR CERAMI C
 MATRIX COMPOSITE MATERIALS
Period Obligations
 05/05/1993-06/14/1994 FY94: \$3,052 TOTAL: \$27,396
Prin. Invest NASA Tech. Officer CASE Category
 J HEMANN LERC/N NEMETH 47-Materials Engr

NCC 3-310 Cleveland State University 6626
 DESIGN PROTOCOLS AND ANALYTICAL STRATEGIES THAT INCO
 RPORATE STRUCTURAL RELIABILITY MODELS
Period Obligations
 06/15/1993-08/31/1995 FY94: \$65,862 TOTAL: \$128,153
Prin. Invest NASA Tech. Officer CASE Category
 S DUFFY LERC/N NEMETH 47-Materials Engr

NCC 3-316 Cleveland State University 6627
 NON-DESTRUCTIVE EVALUATION OF ADVANCED MATERIALS F OR
 HEAT ENGINE AND SPACE STRUCTURE APPLICATIONS
Period Obligations
 08/20/1993-12/31/1994 FY94: \$0 TOTAL: \$20,500
Prin. Invest NASA Tech. Officer CASE Category
 J HEMANN LERC/A VARY 47-Materials Engr

NCC 3-328 Cleveland State University 6628
 AN INVEST OF THEORIES OF FAILURE FOR WOVEN CERAMIC COMP
 MATS AND THEIR IMPLEMENT INTO FIN ELEMENT COD
Period Obligations
 11/02/1993-12/31/1994 FY94: \$105,676 TOTAL: \$105,676
Prin. Invest NASA Tech. Officer CASE Category
 J HEMANN LERC/N NEMETH 47-Materials Engr

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NCC 3-334 Cleveland State University 6629
 THE DEVELOPMENT OF ENGINEERING TOMOGRAPHY
Period Obligations
 12/23/1993-12/31/1994 FY94: \$129,038 TOTAL: \$129,038
Prin Invest NASA Tech Officer CASE Category
 J H HEMANN LERC/G Y BAAKLINI 47-Materials Engr
 LERC/A VARY

NCC 3-336 Cleveland State University 6630
 BEARING LUBRICATION ANALYSIS COUNTER-ROTATING TEST
 APPARATUS DATA ACQUISITION SYSTEM
Period Obligations
 02/04/1994-02/03/1995 FY94: \$19,109 TOTAL: \$19,109
Prin Invest NASA Tech Officer CASE Category
 D J ANTHAN LERC/W R JONES JR. 46-Mech Engr

NCC 3-339 Cleveland State University 6631
 NEW ENVIRONMENTALLY DURABLE MATERIALS AND COATINGS
 FOR SPACE APPLICATION
Period Obligations
 03/11/1994-01/27/1995 FY94: \$76,399 TOTAL: \$76,399
Prin Invest NASA Tech Officer CASE Category
 P HAMBOURGER LERC/S RUTLEDGE 13-Physics

NCC 3-342 Cleveland State University 6632
 PROFESSIONAL ADVANCED RESEARCH AND ANALYSIS
Period Obligations
 04/01/1994-03/31/1995 FY94: \$141,184 TOTAL: \$141,184
Prin Invest NASA Tech Officer CASE Category
 G COULMAN LERC/P R PROKOPIUS 43-Chem Engr

NGT 00-070-396 Cleveland State University 6633
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 09/13/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin Invest NASA Tech Officer CASE Category
 S MISRA HQ/D RUSSELL 22-Computer Science

NAG 3-1404 College of Wooster 6634
 THE TURBIDITY OF A BINARY FLUID MIXTURE VERY CLOSE TO
 THE CRITICAL POINT
Period Obligations
 12/23/1992-12/31/1994 FY94: \$40,000 TOTAL: \$160,000
Prin Invest NASA Tech Officer CASE Category
 D T JACOBS LERC/R A WILKINSON 13-Physics

NAG 3-313 Cuyahoga Community College 6635
 PRE ENGINEERING PROGRAM
Period Obligations
 07/30/1982-11/30/1994 FY94: \$27,000 TOTAL: \$280,630
Prin Invest NASA Tech Officer CASE Category
 L NIRO LERC/L RHODES 49-Engr, NEC
 E T RIVERA

NAG 3-1509 Cuyahoga Community College 6636
 NEW APPROACH TO SELF ACHIEVEMENT-THE NASA PROJECT
Period Obligations
 06/11/1993-07/31/1994 FY94: TOTAL: \$30,518
Prin Invest NASA Tech Officer CASE Category
 S K BECKER LERC/D E LACY 99-Multi-Discip
 LERC/J A CHARLESTON

NAG 3-1666 Cuyahoga Community College 6637
 SCIENCE AND MATH PIPELINE
Period Obligations
 10/01/1994-09/30/1995 FY94: \$30,000 TOTAL: \$30,000
Prin Invest NASA Tech Officer CASE Category
 J L JEFFERSON LERC/J STORTO 99-Multi-Discip

NCA 3-12 Cuyahoga Community College 6638
 MENTORING SERVICES - SPACE ACT AGREEMENT
Period Obligations
 01/29/1992-12/31/1992 FY94: TOTAL: \$189,017
Prin Invest NASA Tech Officer CASE Category
 R TALERICO LERC/C W SLAUTER 45-Elec Engr

NCC 3-185 Cuyahoga Community College 6639
 CCC/NASA LERC MENTOR INTERNSHIP/PARTNERSHIP
Period Obligations
 09/18/1990-09/15/1995 FY94: \$0 TOTAL: \$68,780
Prin Invest NASA Tech Officer CASE Category
 B L CANEPARI LERC/F H YARRIS 41-Aero Engr

NCC 3-323 Cuyahoga Community College 6640
 CENTER FOR URBAN EXCELLENCE-SCIENCE, ENGINEERING M
 ATHEMATICS AND AEROSPACE ACADEMY
Period Obligations
 09/21/1993-10/13/1994 FY94: \$250,000 TOTAL: \$500,000
Prin Invest NASA Tech Officer CASE Category
 S CHAND LERC/R L BONDURANT 99-Multi-Discip

NAGW 1765 Denison University 6641
 LABORATORY SPECTROSCOPIC MEASUREMENTS OF THE
 ABSORPTION
Period Obligations
 06/14/1989-09/30/1994 FY94: \$48,895 TOTAL: \$310,470
Prin Invest NASA Tech Officer CASE Category
 M E MICKELSON HQ/J T BERGSTALH 11-Astronomy

NCC 3-174 Heidelberg College 6642
 CALCULATION OF REVISED NASA THERMAL COEFFICIENTS F OR
 SELECTED SPECIES AT HIGH TEMPERATURE
Period Obligations
 05/17/1990-07/19/1995 FY94: \$0 TOTAL: \$59,800
Prin Invest NASA Tech Officer CASE Category
 M A RENO LERC/B J MCBRIDE 19-Phys Sci, NEC

NAG 3-571 John Carroll University 6643
 OPTICAL SENSORS FOR USE IN PROPULSION CONTROL SYSTEMS
Period Obligations
 08/27/1984-12/16/1994 FY94: \$78,500 TOTAL: \$925,350
Prin Invest NASA Tech Officer CASE Category
 K FRITSCH LERC/G BEHEIM 45-Elec Engr

NAG 3-984 John Carroll University 6644
 DEVELOPMENT WORK ON FIBEROPTIC SENSORS
Period Obligations
 01/27/1989-05/15/1995 FY94: \$44,978 TOTAL: \$416,973
Prin Invest NASA Tech Officer CASE Category
 E J CAROME LERC/G ADAMOVSKY 13-Physics
 J EHSTACE LERC/G SENG

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAG 3-946 Kent State University 6645
DEVELOPMENT OF SECONDARY ION MASS
Period *Obligations*
10/21/1988-11/22/1994 FY94: \$5,000 TOTAL: \$299,667
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C V ABURTO LERC/I WEINBERG 13-Physics

NCC 2-803 Kent State University 6646
EXPERIMENTAL TESTING OF TWISTED NEMATIC AND
SUPERDISTORTED NEMATIC LIQUID CRYSTAL DISPLAYS
Period *Obligations*
05/21/1993-12/31/1994 FY94: \$0 TOTAL: \$77,918
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J KELLY ARC/J LARIMER 13-Physics
O LAVRETOVICH

NCC 3-189 Kent State University 6647
CONTACT SENSOR ATTACHMENT TO TITANIUM METAL COMPOS
ITES (TMCS)
Period *Obligations*
11/27/1990-12/31/1994 FY94: \$8,000 TOTAL: \$244,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C VARGAS-ABURTO LERC/N D PILTCH 47-Materials Engr
LERC/W D WILLIAMS

NCC 3-222 Kent State University 6648
PHYSICS OF HIGH TEMPERATURE SUPERCONDUCTING MATERI ALS
AND THEIR USE IN SPACE APPLICATIONS
Period *Obligations*
12/16/1991-12/12/1994 FY94: \$135,619 TOTAL: \$377,387
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L JOHNSON LERC/R F LEONARD 13-Physics

NCC 3-235 Kent State University 6649
ROLE OF TELECOMMUNICATIONS TECHNOLOGIES AND SERVICES
IN A RESEARCH ENVIRONMENT
Period *Obligations*
11/15/1991-12/31/1994 FY94: TOTAL: \$49,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C M BAKES LERC/F N GOLDBERG 22-Computer Science
LERC/R R SCHULTE

NCC 3-318 Kent State University 6650
MOLECULAR-ENGINEERED MATERIALS FOR AEROSPACE APPLI
CATIONS
Period *Obligations*
07/29/1993-06/30/1995 FY94: \$169,563 TOTAL: \$269,563
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C V ABURTO LERC/A F HEPP 19-Phys Sci, NEC
D G HEHEMANN

NGT 00-051-161 Kent State University 6651
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/22/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J POTTER HQ/P HUNTER 22-Computer Science

NAGW 2143 Kenyon College 6652
ROLE OF ION CHANNELS IN PLANT GRAVITROPISM AS A MO DEL
SYSTEM
Period *Obligations*
06/06/1990-01/31/1995 FY94: \$0 TOTAL: \$155,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K L EDWARDS HQ/T W HALSTEAD 51-Biological Sci

NCC 3-184 Lorain County Community College 6653
LORAIN COUNTY COMMUNITY COLLEGE/LERC MENTOR
INTERNSHIP/PARTNERSHIP
Period *Obligations*
09/20/1990-09/15/1995 FY94: \$0 TOTAL: \$84,080
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J COLE LERC/F H YARRIS 41-Aero Engr

NCC 3-226 Lorain County Community College 6654
AUGMENTATION OF MICROGRAVITY MATERIAL SCIENCE LABO
RATORY CAPABILITY
Period *Obligations*
07/10/1991-06/30/1995 FY94: \$0 TOTAL: \$41,040
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J TOMSIC LERC/T K GLASGOW 46-Mech Engr

NAG 9-446 Miami University 6655
RESEARCH ON SPACE MOTION SICKNESS: DEVELOPMENT AND
INFORMATION OF PREFLIGHT ADAPTATION TRAINING
Period *Obligations*
08/01/1990-08/01/1993 FY94: \$0 TOTAL: \$158,086
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D E PARKER JSC/F KUTYNA 56-Medical Sciences

NAGW 3783 Miami University 6656
GRAVITROPISM AND GOLGI APPARATUS FUNCTION IN CHARA
RHIZBIDS
Period *Obligations*
10/01/1993-08/31/1995 FY94: \$75,000 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J KISS HQ/T W HALSTEAD 51-Biological Sci

NAG 1-1058 Ohio State University 6657
GENERAL SIMULATION OF HELICOPTERS AND INTERFACE TO
ANTENNA PATTERN PREDICTION CODES
Period *Obligations*
09/07/1989-01/31/1995 FY94: \$125,000 TOTAL: \$832,492
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E H NEWMAN LARC/G C BARBER 45-Elec Engr
R G ROJAS LARC/M C GILREATH
W D BURNSIDE

NAG 1-1164 Ohio State University 6658
ROBUST CONTROL OF LINEAR UNCERTAIN SYSTEMS WITH AP
PLICATIONS TO AIRCRAFT CONTROL. FDP
Period *Obligations*
07/13/1990-10/31/1993 FY94: TOTAL: \$159,592
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K YEDAVALLI LARC/C M BELCASTRO 41-Aero Engr
LARC/M R WASZAK

NAG 1-1357 Ohio State University 6659
THERMAL CYCLING CREEP AND LIFE PREDICTION OF HIGH
PERFORMANCE ALUMINUM-BASED METAL MATRIX FDP
Period *Obligations*
11/20/1991-11/30/1994 FY94: \$50,000 TOTAL: \$160,858
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G S DAEHN LARC/W D BREWER 47-Materials Engr
LARC/D M ROYSTER

NAG 1-1555 Ohio State University 6660
NONLINEAR PROBLEMS IN BOUNDARY-LAYER RECEPTIVITY
Period *Obligations*
11/24/1993-11/30/1994 FY94: \$42,302 TOTAL: \$42,302
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J BODONYI LARC/M G MACARAEG 41-Aero Engr

NASA'S UNIVERSITY PROGRAM **OHIO (Continued)**

NAG 2-810 **Ohio State University** **6661**
 DEVELOPMENT OF HUMAN-CENTERED AIRCRAFT AUTOMATION CONCEPTS
Period *Obligations*
 11/19/1992-03/31/1995 FY94: \$24,998 TOTAL: \$49,998
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C E BILLINGS ARC/J V LEBACQZ 69-Psych, NEC
 ARC/J A ALBERS

NAG 3-1164 **Ohid State University** **6668**
 VIDEO DATA COMPRESSION USING NEURAL NETWORKS
Period *Obligations*
 04/16/1990-12/31/1993 FY94: \$0 TOTAL: \$218,439
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S C AHALT LERC/E A BOBINSKY 45-Elec Engr
 A K KRISHNAMURTHY

NAG 2-870 **Ohio State University** **6662**
 A PARALLEL IMPLEMENTATION OF THE FINITE ELEMENT METHOD FOR ELECTROMAGNETICS
Period *Obligations*
 08/16/1993-12/31/1994 FY94: \$0 TOTAL: \$149,997
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R LEE ARC/A C WOO 45-Elec Engr
 F OZGUNER ARC/M J SCHUH
 J F LEE

NAG 3-1220 **Ohio State University** **6669**
 ULTRANSONIC EVALUATION OF DAMAGE IN CERAMIC MATRIX COMPOSITES
Period *Obligations*
 12/03/1990-12/31/1993 FY94: \$0 TOTAL: \$95,519
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S I ROKHLIN LERC/G Y BAAKLINI 47-Materials Engr
 LERC/A VARY

NAG 3-764 **Ohio State University** **6663**
 EXPERIMENTAL STUDY OF ORGANIZED STRUCTURES IN A SUPERSONIC SHEAR LAYER
Period *Obligations*
 11/26/1986-01/09/1995 FY94: \$50,000 TOTAL: \$465,506
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M SAMIMY LERC/K Q ZAMAN 46-Mech Engr
 LERC/C J MAREK

NAG 3-1308 **Ohio State University** **6670**
 THERMAL PROBLEMS IN MATERIALS PROCESSING OF HIGH-TEMPERATURE COMPOSITES
Period *Obligations*
 12/10/1991-01/25/1995 FY94: \$3,408 TOTAL: \$139,847
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S A KORPELA LERC/A CHAIT 47-Materials Engr

NAG 3-843 **Ohio State University** **6664**
 EFFECTS OF MAGNETIC NOZZLE CONFIGURATIONS
Period *Obligations*
 12/02/1987-01/30/1995 FY94: \$60,000 TOTAL: \$402,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T M YORK LERC/M A MANTENIEKS 13-Physics
 D S EMMER

NAG 3-1359 **Ohio State University** **6671**
 ANALYSIS OF EM SCATTERING BY OPEN CAVITIES FOR USE IN RADAR TARGET IDENTIFICATION OF MODERN AIRCRAFT
Period *Obligations*
 07/01/1992-12/31/1992 FY94: \$0 TOTAL: \$94,241
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P H PATHAK LERC/E RHO 45-Elec Engr
 R LEE
 R C CHOU

NAG 3-986 **Ohio State University** **6665**
 AN EXP RES PROG ON THE SUPERSONIC THROUGHFLOW TURB OFAN
Period *Obligations*
 02/02/1989-11/30/1993 FY94: \$0 TOTAL: \$397,004
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J D LEE LERC/R E COLTRIN 41-Aero Engr
 M B BRAGG

NAG 3-1369 **Ohio State University** **6672**
 EVALUATION AND DEVELOPMENT OF A PARALLEL VERSION OF THE NASA ENGINE PERFORMANCE PROGRAM
Period *Obligations*
 09/23/1992-07/31/1993 FY94: \$0 TOTAL: \$19,485
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F OZGUNER LERC/B P CURLETT 22-Computer Science
 J T COURSE LERC/J K LYTLE

NAG 3-1058 **Ohio State University** **6666**
 JET NOISE PRODUCTION AND RADIATION
Period *Obligations*
 07/07/1989-08/31/1994 FY94: \$30,000 TOTAL: \$320,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J N SCOTT LERC/E A KREJSA 41-Aero Engr
 R J BODONYI LERC/J F GROENEWEG

NAG 3-1415 **Ohio State University** **6673**
 CRYSTAL GROWTH AND FLUID MECHANICS PROBLEMS IN DIRECTIONAL SOLIDIFICATION
Period *Obligations*
 12/23/1992-12/31/1995 FY94: \$70,000 TOTAL: \$140,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S TANVEER LERC/A CHAIT 47-Materials Engr
 LERC/V PINES

NAG 3-1108 **Ohio State University** **6667**
 CONSTITUTIVE PARAMETER MEASUREMENTS OF LOSSY MATERIALS
Period *Obligations*
 01/09/1990-05/13/1995 FY94: \$153,027 TOTAL: \$746,306
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A K DOMINEK LERC/C A STEARNS 49-Engr, NEC
 LERC/D R BEHRENDT

NAG 3-1416 **Ohio State University** **6674**
 REVERSE MICELLE BASED SYNTHESIS OF MICROPOROUS MATERIALS IN MICROGRAVITY
Period *Obligations*
 12/29/1992-12/31/1995 FY94: \$122,000 TOTAL: \$237,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P K DUTTA LERC/T K GLASGOW 47-Materials Engr
 LERC/P TIN

NASA'S UNIVERSITY PROGRAM OHIO (Continued)

NAG 3-1437	Ohio State University	6675
MODELING OF DIFFUSION IN LIQUID GE AND ITS ALLOYS		
<i>Period</i>	<i>Obligations</i>	
01/19/1993-02/14/1995	FY94: \$38,033	TOTAL: \$75,733
<i>Pnn. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D G STROUD	LERC/T K GLASGOW	47-Materials Engr
	LERC/C R KROLIKOWSKI	

NAG 3-1602	Ohio State University	6683
INFLUENCE OF FREE CONVECTION IN DISSOLUTION		
<i>Period</i>	<i>Obligations</i>	
08/09/1994-08/08/1995	FY94: \$48,774	TOTAL: \$48,774
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P K GUPTA	LERC/A CHAIT	47-Materials Engr
S A KORPELA	LERC/M ZLATKOWSKI	

NAG 3-1440		Ohio State University	6676
PARALLELIZATION OF STRUCTURES CODES			
<i>Period</i>	<i>Obligations</i>		
01/19/1993-02/17/1995	FY94: \$44,955	TOTAL: \$74,955	
<i>Pnn. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
F OZGUNER	LERC/G J FOLLEN	22-Computer Science	
	LERC/R CIAUS		

NAG 3-1612	Ohio State University	6684
INVESTIGATIONS OF MULTIPLE-LAYER CONVECTION		
<i>Period</i>	<i>Obligations</i>	
06/07/1994-06/06/1995	FY94: \$50,000	TOTAL: \$50,000
<i>Pnn. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C. D. ANDERHECK	LERC/R S SKARDA	13-Physics

NAG 3-1461	Ohio State University	6677
HYDROGEN PASSIVATION AND CHARACTERIZATION OF MISMATCHED H-INDUCED DEFECTS OF HETEROEPIITAXIAL INP SOLAR CE		
<i>Period</i>	<i>Obligations</i>	
02/26/1993-11/22/1994	FY94: \$18,976	TOTAL: \$44,958
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S A RINGEL	LERC/I WEINBERG	45-Elec Engr

NAG 3-1649		Ohio State University	6685
DEVELOPMENT OF HYBRID ANALYTICAL/NUMERICAL TOOLS TO PREDICT CAVITY SCATTERING CONTRIBUTION FOR RADA			
Period	Obligations		
07/14/1994-07/13/1995	FY94: \$150,000	TOTAL: \$150,000	
Prin. Invest	NASA Tech. Officer	CASE Category	
P H PATHAK	LERC/E RHO	45-Elec Engr	

NAG 3-1465	Ohio State University	6678
EXPERIMENTAL STUDIES OF HIGH POWER, HIGH PRESSURE PLASMA SOURCES		
<i>Period</i>	<i>Obligations</i>	
03/17/1993-09/07/1994	FY94: \$0	TOTAL: \$200,000
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P J TURCHI	LERC/F M CURRAN	42-Astro Engr
	LERC/J M SANKOVIC	

NAG 5-684	Ohio State University	6686
AIRBORNE AND SPACEBORNE REMOTE SENSING OBSERVATION OF THE GREENLAND ICE SHEET		
<i>Period</i>	<i>Obligations</i>	
05/23/1991-06/30/1995	FY94: \$0	TOTAL: \$324,408
<i>Prin Invest</i>	<i>NASA Tech Officer</i>	<i>CASE Category</i>
K C .JEFZEK	GSFC/W B KRABILL	39-Env Sci. NEC

NAG 3-1496	Ohio State University	6679
ELECTROMAGNETIC SCATTERED FIELD EVALUATION AND DATA COMPRESSION USING IMAGING TECHNIQUES		
<i>Period</i>	<i>Obligations</i>	
06/02/1993-09/14/1995	FY94: \$102,000	TOTAL: \$251,980
<i>Pnn Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W D BURNSIDE	LERC/E RHO	45-Elec Enr

NAG 5-1644	Ohio State University	6687
ATOMIC DATA AND SPECTRAL ANALYSIS OF CARBON NITROG EN, OXYGEN AND SILICON IONS O		
<i>Period</i>	<i>Obligations</i>	
06/17/1991-06/30/1993	FY94: \$0	TOTAL: \$67,004
<i>Prin Invest</i>	<i>NASA Tech Officer</i>	<i>CASE Category</i>
A K PRADHAM	GSFC/D WEST	11-Astronomy

NAG 3-1497	Ohio State University	6680
IMAGING THE PROBE RANGE	DATA OF WRDC'S ADVANCED COMPACT RANGE	
<i>Period</i>	<i>Obligations</i>	
06/02/1993-12/31/1994	FY94: \$0	TOTAL: \$25,041
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W D BURNSIDE	LERC/E RHO	45-Elec Engr
I J GUPTA		

NAG 5-1645	Ohio State University	6688
EMISSION FROM SINGLY IONIZED IRON IN ACTIVE GALAXI ES		
<i>Period</i>	<i>Obligations</i>	
06/17/1991-06/30/1994	FY94: \$0	TOTAL: \$21,173
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F W HAMANN	GSFC/D WEST	11-Astronomy

NAG 3-1502	Ohio State University	6681
AN INVESTIGATION OF ANGULARLY-RESOLVED FILTERED RAYLEIGH SCATTERING TECHNIQUE		
<i>Period</i>	<i>Obligations</i>	
06/18/1993-05/02/1995	FY94: \$80,583	TOTAL: \$117,303
<i>Pnn. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M SAMIMY	LERC/M P WERNET	13-Physics

NAG 5-1824		Ohio State University	6689
SPECTRAL ENERGY DISTRIBUTION IN MRK 590 - INTERNETIONAL			
AGN WATCH: MAPPING THE BROAD-LINE REGION.			
<i>Period</i>		<i>Obligations</i>	
11/08/1991-03/31/1995		FY94: \$14,330	TOTAL: \$89,786
<i>Prin. Invest.</i>		<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B M PETERSON		GSFC/D WEST	11-Astronomy

NAG 3-1574	Ohio State University	6682
A STUDY OF TAILPLANE ICING		
<i>Period</i>	<i>Obligations</i>	
03/22/1994-03/21/1995	FY94: \$60,000	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G M GREGOREK	LERC/T P RATVASKY	41-Aero Engr

NAG 5-1992	Ohio State University	6690
THE STAR FORMATION HISTORY OF DWARF GALAXIES IN DIFFERENT ENVIRONMENTS		
<i>Period</i>	<i>Obligations</i>	
06/12/1992-06/14/1993	FY94: \$0	TOTAL: \$22,484
<i>Pnn, Invest</i>	<i>NASA Tech Officer</i>	<i>CASE Category</i>
VADER	GSFC/D WEST	11-Astronomy

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAG 5-2041 **Ohio State University** **6691**
INVESTIGATION FOR IMPROVING GLOBAL POSITIONING SYSTEM
(GPS) ORBITS USING A DISCRETE SEQUENTIAL . . .
Period *Obligations*
07/17/1992-08/14/1994 FY94: \$0 TOTAL: \$40,056
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C C GOAD GSFC/B H PUTNEY 31-Atmos Sci

NAG 5-2192 **Ohio State University** **6692**
X-RAY OBSERVATIONS OF THE BLACK HOLE CANDIDATE V40 4
CYGNI
Period *Obligations*
02/09/1993-02/14/1995 FY94: \$15,000 TOTAL: \$21,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R M WAGNER GSFC/R PETRE 11-Astronomy

NAG 5-2355 **Ohio State University** **6693**
MULTIWAVELENGTH STUDY OF X-RAY NOVAE
Period *Obligations*
08/25/1993-11/14/1994 FY94: \$0 TOTAL: \$19,106
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R M WAGNER GSFC/J P NORRIS 11-Astronomy
C R SHRADER GSFC/N WHITE

NAG 5-2477 **Ohio State University** **6694**
THE STRUCTURE OF THE BROAD-LINE REGION IN WELL-STU DIED
AGNS
Period *Obligations*
01/29/1994-01/31/1996 FY94: \$89,243 TOTAL: \$89,243
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B PETERSON GSFC/D WEST 11-Astronomy

NAG 9-390 **Ohio State University** **6695**
GUIDELINES FOR HUMAN INTERFACE WITH ARTIFICIAL
INTELLIGENCE
Period *Obligations*
10/01/1989-11/01/1994 FY94: \$0 TOTAL: \$187,712
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D D WOODS JSC/J MALIN 22-Computer Science

NAG 9-677 **Ohio State University** **6696**
NEW CONCEPTS FOR SUPPORTING COOPERATIVE FAULT MANA
GEMENT
Period *Obligations*
03/10/1993-10/31/1994 FY94: \$10,000 TOTAL: \$25,288
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D D WOODS JSC/J MALIN 22-Computer Science

NAG 9-707 **Ohio State University** **6697**
THERMO ANALYTICAL RESEARCH OF INTEREST TO SPACE EX
PLORATION
Period *Obligations*
08/18/1993-10/01/1994 FY94: \$0 TOTAL: \$14,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K GALLAGER JSC/J L GOODING 59-Life Sci, NEC

NAGW 973 **Ohio State University** **6698**
COMMERCIAL DEVELOPMENT OF SPACE
Period *Obligations*
09/01/1986-10/31/1994 FY94: \$1,050,000 TOTAL: \$9,321,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H MOELLERING HQ/W A ORAN 41-Aero Engr
J KIMERLING HQ/A VILLAMIL
A F SCHENK

NAGW 2035 **Ohio State University** **6699**
MICROWAVE OBSERVATIONS OF POLAR ICE
Period *Obligations*
06/09/1990-09/30/1993 FY94: \$0 TOTAL: \$360,946
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K C JEZEK HQ/R H THOMAS 33-Oceanography
HQ/W S WILSON

NAGW 2600 **Ohio State University** **6700**
NAGW-3600/OHIO STATE UNIV/DETERMINING THE EXTENT AND
DYNAMICS OF LATE PLEISTOCENE ICESHEETS IN THE SOV
Period *Obligations*
08/22/1991-03/31/1994 FY94: \$0 TOTAL: \$58,310
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S L FORMAN HQ/R H THOMAS 32-Geological Sci

NAGW 2639 **Ohio State University** **6701**
MILLIMETER AND SUBMILLIMETER SPECTROSCOPY
Period *Obligations*
08/20/1991-02/28/1995 FY94: \$99,290 TOTAL: \$424,511
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F C DE LUCIA HQ/M J KURYLO 13-Physics
HQ/R F HAMPSON

NAGW 2644 **Ohio State University** **6702**
DYNAMICS OF THE GREENLAND AND ANTARCTIC ICE SHEETS
USING SPACE-BORNE IMAGING
Period *Obligations*
04/03/1992-06/30/1994 FY94: \$0 TOTAL: \$416,649
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K JEZEK HQ/R H THOMAS 39-Env Sci, NEC

NAGW 2718 **Ohio State University** **6703**
GENERAL CIRCULATION MODEL SIMULATIONS FOR ANTARCTICA
Period *Obligations*
08/30/1991-05/31/1995 FY94: \$69,435 TOTAL: \$269,560
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H BROMWICH HQ/R H THOMAS 39-Env Sci, NEC
HQ/R A SCHIFFER

NAGW 2786 **Ohio State University** **6704**
MEAGING THE CANADIAN AND OHIO STATE SETI PROGRAMS
Period *Obligations*
01/03/1992-12/31/1993 FY94: \$0 TOTAL: \$94,480
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R S DIXON HQ/J D RUMMEL 11-Astronomy

NAGW 2906 **Ohio State University** **6705**
SUBMILLIMETER LABORATORY INVESTIGATIONS: SPECTROSCOPY
AND COLLISIONS
Period *Obligations*
02/20/1992-01/31/1995 FY94: \$65,999 TOTAL: \$174,777
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E HERBST HQ/L J CAROFF 11-Astronomy
F C DE LUCIA

NAGW 3594 **Ohio State University** **6706**
MUTATIONAL AND CELL BIOLOGICAL ANALYSIS
Period *Obligations*
05/20/1993-05/31/1995 FY94: \$67,000 TOTAL: \$117,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F D FISK HQ/T W HALSTEAD 51-Biological Sci

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAGW 3668 **Ohio State University** **6707**
DETECTION OF EXTRATERRESTRIAL SIGNALS AT OHIO STATE UNIVERSITY
Period *Obligations*
06/23/1993-05/31/1994 FY94: \$30,600 TOTAL: \$130,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C A KLEIN HQ/J D RUMMEL 11-Astronomy

NAGW 3677 **Ohio State University** **6708**
SATELLITE AND MODEL ANALYSIS OF THE ATMOSPHERIC MOISTURE BUDGET
Period *Obligations*
06/30/1993-04/30/1995 FY94: \$160,169 TOTAL: \$230,144
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H BROMWICH HQ/R H THOMAS 39-Env Sci, NEC
HQ/R A SCHIFFER

NAGW 3730 **Ohio State University** **6709**
ROOT GRAVITROPISM IN MAIZE AND ARABIDOPSIS
Period *Obligations*
09/03/1993-06/30/1995 FY94: \$65,000 TOTAL: \$125,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M L EVANS HQ/T W HALSTEAD 51-Biological Sci

NAGW 3933 **Ohio State University** **6710**
PRELIM ASSESSMENT OF PALEOCLIMATE RECORDS PRESERVED IN ICE CORES FROM FRANZ JOSEF LAND
Period *Obligations*
04/08/1994-03/31/1995 FY94: \$42,057 TOTAL: \$42,057
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L THOMPSON HQ/R H THOMAS 39-Env Sci, NEC
HQ/J S THEON

NAGW 3982 **Ohio State University** **6711**
MECHANISM OF PHYTOCHROME REGULATION OF SHOOT GRAVITROPISM IN ARABIDOPSIS
Period *Obligations*
05/10/1994-03/31/1995 FY94: \$82,000 TOTAL: \$82,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R HANGARTEN HQ/T W HALSTEAD 51-Biological Sci

NAG10-84 **Ohio State University** **6712**
INTERACTION OF CALCIUM CALMODULIN AND AUXIN IN ROOT GRAVITROPISM
Period *Obligations*
06/01/1991-11/30/1993 FY94: \$0 TOTAL: \$120,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M L EVANS KSC/W M KNOTT 51-Biological Sci

NAG10-85 **Ohio State University** **6713**
GRAVIPERCEPTION IN HIGHER PLANTS ARABIDOPSIS AS A MODEL SYSTEM
Period *Obligations*
05/31/1991-10/28/1994 FY94: \$0 TOTAL: \$109,970
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F D SACK KSC/W M KNOTT 51-Biological Sci

NAS 3-26305 **Ohio State University** **6714**
COMPACT RANGE DESIGN
Period *Obligations*
06/29/1991-10/30/1995 FY94: \$29,998 TOTAL: \$566,998
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W D BURNSIDE LERC/R R KUNATH 45-Elec Engr
LERC/C A RAQUET

NAS 5-30946 **Ohio State University** **6715**
GLRS TEAM MEMBER SUPPORT TO THE EARTH OBSERVING SYSTEM (EOS) PROGRAM
Period *Obligations*
12/18/1990-12/31/1994 FY94: \$99,779 TOTAL: \$144,779
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H THOMAS GSFC/T W HAMILTON 31-Atmos Sci

NAS 5-32643 **Ohio State University** **6716**
A COMPREHENSIVE OPACITIES/ATOMIC DATABASE FOR THE ANALYSIS OF ASTROPHYSICAL SPECTRA AND MODELING
Period *Obligations*
08/18/1994-09/17/1997 FY94: \$59,000 TOTAL: \$59,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A PRADHAN GSFC/D WEST 11-Astronomy

NAS 8-39930 **Ohio State University** **6717**
VPPA TORCH PERFORMANCE AND DESIGN ANALYSIS
Period *Obligations*
03/29/1994-03/28/1996 FY94: \$192,195 TOTAL: \$192,195
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V SABRAMANIAM MSFC/C RUSSELL 47-Materials Engr

NCC 2-592 **Ohio State University** **6718**
COGNITIVE ENGINEERING IN AEROSPACE APPLICATIONS
Period *Obligations*
03/13/1989-12/31/1994 FY94: \$119,180 TOTAL: \$762,576
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D D WOODS ARC/K CORKER 41-Aero Engr
ARC/B T SWEET

NCC 2-830 **Ohio State University** **6719**
DISTRIBUTED AND COOPERATIVE PROBLEM-SOLVING IN THE NATIONAL AVIATION SYSTEM
Period *Obligations*
10/19/1993-09/30/1994 FY94: \$66,150 TOTAL: \$66,150
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J SMITH ARC/J M ORASANU 59-Life Sci, NEC

NCC 3-198 **Ohio State University** **6720**
A STUDY OF UNSTEADY PRESSURES ON OSCILLATING AIRFOIL IN CASCADE / 4320
Period *Obligations*
01/30/1991-01/13/1993 FY94: \$0 TOTAL: \$145,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D LEE LERC/J K RAMSEY 41-Aero Engr
G M GREGOREK

NCC 3-234 **Ohio State University** **6721**
MATRIX CHARACTERIZATION AND HOT PRESSING OF SRAL2 Si 208
Period *Obligations*
11/08/1991-03/31/1994 FY94: \$0 TOTAL: \$71,756
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C H DRUMMOND LERC/N P BANSAL 47-Materials Engr
LERC/S R LEVINE

NCC 3-341 **Ohio State University** **6722**
MINIATURIZED LOW POWER COMPONENTS FOR MICROWAVE COMMUNICATION CIRCUITS
Period *Obligations*
03/08/1994-03/07/1995 FY94: \$24,997 TOTAL: \$24,997
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G J VALCO LERC/J D WALKER 45-Elec Engr

NASA'S UNIVERSITY PROGRAM **OHIO (Continued)**

NGT 00-030-053	Ohio State University	6723	NASG-1498	Ohio State University	6732
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			ANALYSIS OF AIRBORNE ANTENNA PATTERNS		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
09/06/1991-08/31/1993	FY94: \$0	TOTAL: \$44,000	01/16/1978-07/31/1994	FY94: \$0	TOTAL: \$1,097,890
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G CASASSA	HQ/D M BUTLER	39-Env Sci, NEC	W D BURNSIDE	LARC/M C GILREATH	45-Elec Engr
I WHILLANS	HQ/G S WILSON		R G ROJAS	LARC/C R COCKRELL	
NGT 00-050-668	Ohio State University	6724	NSG-1613	Ohio State University	6733
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			RADAR CROSS SECTION STUDIES		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
09/11/1990-09/30/1993	FY94: \$0	TOTAL: \$66,000	04/18/1979-05/31/1995	FY94: \$844,599	TOTAL: \$8,035,044
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F D SACK	HQ/F C OWENS	51-Biological Sci	W D BURNSIDE	LARC/M C GILREATH	45-Elec Engr
			L PETERS JR	LARC/W C SAWYER	
			A K DOMINEK		
NGT 00-050-945	Ohio State University	6725	NAG 1-1423	Ohio University	6734
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			GPS INTERFEROMETRY		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
07/01/1992-12/31/1994	FY94: \$11,000	TOTAL: \$55,000	04/06/1992-03/31/1996	FY94: \$436,000	TOTAL: \$645,279
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M SAMIMY	LERC/F MONTEGANI	46-Mech Engr	F VAN GRAAS	LARC/R M HUESCHEN	49-Engr, NEC
NGT 00-051-072	Ohio State University	6726	NAG 8-217	Ohio University	6735
GRADUATE STUDENT RESEARCHERS PROGRAM			COMPUTERIZED DESIGN OF CONTROLLERS USING DATA MODELS		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
06/02/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	02/21/1992-04/20/1995	FY94: \$0	TOTAL: \$135,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M R FOSTER	HQ/D A HOLLAND	41-Aero Engr	R D IRWIN	MSFC/A P BUKLEY	49-Engr, NEC
			J R MITCHELL	MSFC/M BUTLER	
NGT 00-051-193	Ohio State University	6727	NAG 8-1041	Ohio University	6736
GRADUATE STUDENT RESEARCHERS PROGRAM			ENHANCEMENTS TO THE SSME TRANSFER FUNCTION MODEL ING CODE		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
09/29/1993-08/31/1996	FY94: \$44,000	TOTAL: \$44,000	03/16/1994-03/15/1995	FY94: \$31,212	TOTAL: \$31,212
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K ISHII	LERC/F MONTEGANI	46-Mech Engr	R D IRWIN	MSFC/T H FOX	46-Mech Engr
			J R MITCHELL		
NGT 00-051-237	Ohio State University	6728	NCC 2-827	Ohio University	6737
GRADUATE STUDENT RESEARCHERS PROGRAM			DISTRIBUTED AND COOPERATIVE PROBLEM-SOLVING IN THE NATIONAL AVIATION SYSTEM		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
09/08/1994-08/31/1997	FY94: \$21,500	TOTAL: \$21,500	09/20/1993-11/30/1994	FY94: \$34,120	TOTAL: \$63,720
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R SINGH	LERC/F MONTEGANI	46-Mech Engr	C E MCCOY	ARC/J M ORASANY	59-Life Sci, NEC
			P J SMITH		
NGT 00-051-255	Ohio State University	6729	NCC 3-194	Ohio University	6738
GRADUATE STUDENT RESEARCHERS PROGRAM			IMPROVED FILM ADHESION TO POLYIMIDE BY ION IMPLANTATION		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
06/14/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000	01/04/1991-01/13/1994	FY94: \$0	TOTAL: \$73,044
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T E NYGREN	LARC/L EVANS	62-Social Aspects	D A GULING	LERC/M A MEADOR	12-Chemistry
NGT 00-051-281	Ohio State University	6730	NGR36-9017	Ohio University	6739
GRADUATE STUDENT RESEARCHERS PROGRAM			AIR TRANSPORTATION PROBLEMS WITH EMPHASIS ON GENERAL AVIATION AVIONICS \$50,000		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
06/14/1994-09/30/1995	FY94: \$22,000	TOTAL: \$22,000	02/26/1971-01/31/1995	FY94: \$150,000	TOTAL: \$1,950,691
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F SACK	HQ/G LESANE	51-Biological Sci	R H MCFARLAND	LARC/F R MORRELL	45-Elec Engr
				LARC/W H BRYANT	
NGT 00-070-349	Ohio State University	6731			
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM					
<i>Period</i>	<i>Obligations</i>				
08/12/1993-09/06/1994	FY94: \$0	TOTAL: \$22,000			
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>			
S KORPELA	HQ/D K RUSSELL	46-Mech Engr			

NASA'S UNIVERSITY PROGRAM

OHIO (Continued)

NGT 00-050-863 **Ohio University** **6740**
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 01/03/1992-08/31/1994 FY94: \$0 TOTAL: \$63,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F C HAGERMAN KSC/B MARTIN 39-Env Sci, NEC
 G A DUDLEY

NAG 1-448 **University of Akron** **6741**
 SYNTHESIS AND CHARACTERIZATION OF THERMALLY-STABLE
 SOLVENT/IMPACT RESISTANT THERMOPLASTIC POLYIMIDES
Period *Obligations*
 02/13/1984-03/31/1995 FY94: \$50,001 TOTAL: \$924,995
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F W HARRIS LARC/P M HERGENROTHER 12-Chemistry
 LARC/B J JENSEN

NAG 3-379 **University of Akron** **6742**
 MULTIAXIAL STRUCTURAL BEHAVIOR OF HIGH TEMPERATURE
 MATERIALS
Period *Obligations*
 12/02/1982-11/07/1994 FY94: \$22,609 TOTAL: \$956,359
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D N ROBINSON LERC/S M ARNOLD 41-Aero Engr
 J R ELLIS

NAG 3-872 **University of Akron** **6743**
 SYMBOLIC DRIVATION OF CONSTITUTIVE MATERIAL MODESL AND
 AUTOMATIC CODE GENERATION
Period *Obligations*
 01/20/1988-01/31/1994 FY94: \$0 TOTAL: \$363,209
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 H Q TAN LERC/S M ARNOLD 41-Aero Engr

NAG 3-901 **University of Akron** **6744**
 FINITE ELEMENT INPLEMENTATION AND COMPUTATUIONAL
 TECHNIQUES
Period *Obligations*
 04/28/1988-05/31/1995 FY94: \$69,935 TOTAL: \$395,870
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T P CHANG LERC/S M ARNOLD 41-Aero Engr
 T Y CHANG

NAG 3-969 **University of Akron** **6745**
 EXPERIMENTAL AND ANALYTICAL STUDY OF BRUSH SEALS
Period *Obligations*
 12/29/1988-06/09/1995 FY94: \$0 TOTAL: \$308,748
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J BRAUN LERC/G BOBULA 46-Mech Engr
 LERC/R C HENDRICKS

NAG 3-1047 **University of Akron** **6746**
 OPTIMAL SPIRAL BEVEL TRANSMISSION DESIGN
Period *Obligations*
 05/17/1989-11/05/1994 FY94: \$0 TOTAL: \$247,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M SAVAGE LERC/H H COE 46-Mech Engr

NAG 3-1146 **University of Akron** **6747**
 HIERARCHICAL PARTITIONING OF GLOBAL CONTROLLERS
Period *Obligations*
 02/27/1990-01/25/1995 FY94: \$14,997 TOTAL: \$155,874
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P H SCHMIDT LERC/P J OUZTS 21-Mathematics
 LERC/C F LORENZO

NAG 3-1189 **University of Akron** **6748**
 MINORITY ENGINEERING PROGRAM
Period *Obligations*
 06/21/1990-07/22/1994 FY94: \$0 TOTAL: \$91,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B MCCLAIN LERC/R F LAWRENCE 99-Multi-Discip
 P LAM

NAG 3-1223 **University of Akron** **6749**
 DAMAGE MECHANICS CONTROLLED BY THE INTERACTION OF
 MICROCRACKS IN THE INTERPHASE OF MMC AND BMC
Period *Obligations*
 11/28/1990-12/14/1994 FY94: \$55,000 TOTAL: \$201,003
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W K BINIENDA LERC/S M ARNOLD 41-Aero Engr

NAG 3-1289 **University of Akron** **6750**
 COMPRESSIVE PROPERTIES AND INTERFACE OF CARBON FIBER
 S FOR ADVANCED COMPOSITES
Period *Obligations*
 06/28/1991-12/09/1994 FY94: \$30,000 TOTAL: \$94,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R K EBY LERC/K J BOWLES 47-Materials Engr
 LERC/G D ROBERTS

NAG 3-1305 **University of Akron** **6751**
 RHEOLOGICAL CHARACTERIZATION OF EXPERIMENTAL POLYM IDE
 RESINS
Period *Obligations*
 11/06/1991-11/30/1993 FY94: \$0 TOTAL: \$39,922
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E A MEINECKE LERC/G D ROBERTS 47-Materials Engr

NAG 3-1350 **University of Akron** **6752**
 DESIGN OPTIMIZATION OF STRUCTURAL COMPONENTS FOR T HE
 SPACE STATION FREEDOM IN DYNAMIC REGIME
Period *Obligations*
 05/19/1992-03/24/1994 FY94: \$9,300 TOTAL: \$104,033
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T Y CHANG LERC/L BARKE 42-Astro Engr
 LERC/D A HOPKINS

NAG 3-1361 **University of Akron** **6753**
 EXPERIMENTAL INVESTIGATION OF ROTATING CYCLINDRICAL SEAL
 CONFIGURATIONS FOR NUMERICAL CODE VALIDATI
Period *Obligations*
 07/10/1992-12/14/1994 FY94: \$0 TOTAL: \$65,381
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J BRAUN LERC/A D LIANG 46-Mech Engr
 F K CHOY LERC/R C HENDRICKS

NAG 3-1366 **University of Akron** **6754**
 NUMERICAL AND EXPERIMENTAL STUDIES ON FOIL BEARINGS
 COUPLING OF THERMAL AND DYNAMIC NON-LINEAR EFFECTS
Period *Obligations*
 09/14/1992-09/30/1994 FY94: \$0 TOTAL: \$102,784
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J BRAUN LERC/J F WALKER 46-Mech Engr
 F K CHOY

NAG 3-1376 **University of Akron** **6755**
 DEVELOPMENT OF A MODEL BASED TECHNIQUE FOR GEAR DI
 AGNOSTICS USING THE WIGNER-VILLE METHOD
Period *Obligations*
 10/30/1992-10/31/1994 FY94: \$26,400 TOTAL: \$119,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F K CHOY LERC/J J ZAKRAJSEK 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
OHIO (Continued)**

NAG 3-1444 University of Akron 6756
NEURAL NETWORKS CONTROL OF A MULTIPLE DEGREE-OF-FREEDOM REACTION COMPENSATING PLATFORM SYSTEM
Period Obligations
01/25/1993-07/14/1993 FY94: TOTAL: \$10,035
Prin. Invest. NASA Tech. Officer CASE Category
Y J LIN LERC/B B CHOI 46-Mech Engr

NAG 3-1450 University of Akron 6757
INTERDISCIPLINARY RESEARCH IN COMPUTATIONAL FLUID DYNAMICS AND CONTROL SYSTEMS
Period Obligations
02/10/1993-01/31/1995 FY94: \$56,889 TOTAL: \$125,385
Prin. Invest. NASA Tech. Officer CASE Category
T T HARTLEY LERC/K J MELCHER 41-Aero Engr
LERC/C F LORENZO

NAG 3-1491 University of Akron 6758
UTILIZATION OF THE FRACTIONAL CALCULUS IN CONTROL ENGINEERING
Period Obligations
04/26/1993-05/31/1995 FY94: \$39,839 TOTAL: \$69,834
Prin. Invest. NASA Tech. Officer CASE Category
T T HARTLEY LERC/C F LORENZO 49-Engr, NEC

NAG 3-1493 University of Akron 6759
STATE-VARIABLES INTEGRATORS IN COMPUTATIONAL VISCO PASTICITY
Period Obligations
04/21/1993-12/31/1994 FY94: \$0 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
A F SALEEB LERC/S M ARNOLD 41-Aero Engr

NAG 3-1498 University of Akron 6760
MODELING AND STRUCTURE-PROPERTY RELATIONSHIPS OF POLYIMIDE THERMOSETTING RESINS
Period Obligations
05/26/1993-12/31/1994 FY94: \$20,063 TOTAL: \$39,950
Prin. Invest. NASA Tech. Officer CASE Category
F N KELLEY LERC/G D ROBERTS 47-Materials Engr
V GALIATSATOS

NAG 3-1544 University of Akron 6761
ACTIVE ROTOR BLADE TIP CLEARANCE CONTROL - PHASE I
Period Obligations
10/18/1993-10/22/1994 FY94: \$34,609 TOTAL: \$34,609
Prin. Invest. NASA Tech. Officer CASE Category
Y J LIN LERC/B B CHOI 46-Mech Engr

NAG 3-1547 University of Akron 6762
AN EXPERIMENTAL AND NUMERICAL INVESTIGATION OF THE FLOW PATTERNS, PRESSURE DROPS AND FLOW COEFFICIENTS
Period Obligations
11/26/1993-11/30/1994 FY94: \$56,570 TOTAL: \$56,570
Prin. Invest. NASA Tech. Officer CASE Category
M J BRAUN LERC/J F WALKER 46-Mech Engr

NAG 3-1551 University of Akron 6763
APPLICATIONS OF PARALLEL COMPUTATION IN MICRO-MECHANICS AND FINITE ELEMENT METHOD
Period Obligations
12/02/1993-12/01/1994 FY94: \$79,987 TOTAL: \$79,987
Prin. Invest. NASA Tech. Officer CASE Category
H TAN LERC/S M ARNOLD 41-Aero Engr

NAG 3-1553 University of Akron 6764
DURABILITY AND LIFE PREDICTION MODELING IN POLYIMIDE COMPOSITES
Period Obligations
12/17/1993-12/16/1994 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
W K BINIERDA LERC/G D ROBERTS 47-Materials Engr
LERC/K BOWLES

NAS 3-27318 University of Akron 6765
PREPARATION AND EVALUATION OF ADVANCED ORGANIC FIBERS FOR HIGH TEMPERATURE APPLICATION
Period Obligations
05/12/1994-06/12/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
F W HARRIS LERC/C H CHUANG 47-Materials Engr
S D CHENG

NCC 3-104 University of Akron 6766
SUPPORT MICROGRAV MATERIALS SCIENCE
Period Obligations
12/11/1987-01/30/1995 FY94: \$187,103 TOTAL: \$1,407,219
Prin. Invest. NASA Tech. Officer CASE Category
G W YOUNG LERC/G P ROBERTS 47-Materials Engr
S I HARIHARAN LERC/T K GLASGOW

NCC 3-161 University of Akron 6767
A NON-INTRUSIVE COMP-AIDED METHOD FOR TEMP AND VEL EVAL IN FLU USING THERMOCHROMIC LIQ CRYSTALS (TLC)
Period Obligations
01/23/1990-10/31/1993 FY94: TOTAL: \$70,169
Prin. Invest. NASA Tech. Officer CASE Category
M J BRAUN LERC/S A HIPPENSTEELE 46-Mech Engr
LERC/C M RUSSELL

NCC 3-164 University of Akron 6768
PULSED NMR AND DIFFUSION STUDIES IN HIGH TEMPERATURE STRUCTURAL POLYMERS AND COMPOSITES
Period Obligations
01/29/1990-12/31/1995 FY94: \$0 TOTAL: \$124,238
Prin. Invest. NASA Tech. Officer CASE Category
E D VON MEERWALL LERC/G D ROBERTS 13-Physics

NCC 3-165 University of Akron 6769
HIGH SPEED FLOW VISUALIZATION IN COMPRESSIBLE GASES: APPLICATION TO FLOW IN A TRANSITION DUCT
Period Obligations
01/30/1990-10/31/1993 FY94: TOTAL: \$62,824
Prin. Invest. NASA Tech. Officer CASE Category
M J BRAUN LERC/S A HIPPENSTEELE 46-Mech Engr
LERC/L M RUSSELL

NCC 3-178 University of Akron 6770
APPLICATION OF UPWIND PARABOLIZED NAVIER-STOKES CODE TO AIRCRAFT PROPULSION SYSTEMS
Period Obligations
07/05/1990-11/30/1993 FY94: \$0 TOTAL: \$230,062
Prin. Invest. NASA Tech. Officer CASE Category
B P LEONARD LERC/M S LIOU 41-Aero Engr
S MOKHTARI

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NCC 3-188 University of Akron 6771
 3-D FEM SIM OF DELAMIN PROG IN CROSS-PLY GRAPH-POL LAM
 INIT BY TRANSV CRACKS IN 90 LAYER
Period Obligations
 10/24/1990-08/31/1994 FY94: \$0 TOTAL: \$89,490
Prin. Invest. NASA Tech. Officer CASE Category
 W K BINIENDA LERC/G D ROBERTS 47-Materials Engr

NCC 3-209 University of Akron 6772
 MULTIVARIABLE ADAPTATIVE CONTROL OF INTERFACE FOR
 PROGRAMMABLE MULTIZONE CRYSTAL GROWTH FURNACE
Period Obligations
 02/27/1991-01/31/1995 FY94: \$99,096 TOTAL: \$202,299
Prin. Invest. NASA Tech. Officer CASE Category
 C BATUR LERC/B N ROSENTHAL 47-Materials Engr
 LERC/T K GLASGOW

NCC 3-211 University of Akron 6773
 STEREO IMAGING OF INTERFACE SHAPE DURING CRYSTAL G
 ROWTH IN TRANSPARENT FURNACES
Period Obligations
 03/05/1991-09/30/1993 FY94: \$0 TOTAL: \$71,575
Prin. Invest. NASA Tech. Officer CASE Category
 C BATUR LERC/T K GLASGOW 47-Materials Engr

NCC 3-225 University of Akron 6774
 ORGANOMETALLIC POLYMERIC CONDUCTORS
Period Obligations
 06/28/1991-12/31/1994 FY94: \$83,623 TOTAL: \$345,896
Prin. Invest. NASA Tech. Officer CASE Category
 W J YOUNGS LERC/M A MEADOR 12-Chemistry

NCC 3-231 University of Akron 6775
 STEREO IMAGING BASED PARTICLE VELOCIMETER
Period Obligations
 09/05/1991-05/31/1993 FY94: \$0 TOTAL: \$15,800
Prin. Invest. NASA Tech. Officer CASE Category
 C BATUR LERC/M B MEYER 47-Materials Engr

NCC 3-240 University of Akron 6776
 EVAL AN IMP METHOD FOR DET THE SHAPE OF SMALL DISP
 ERSED PARTICLES USING DYN DEPOLAR LASER LGT SCATT
Period Obligations
 12/01/1991-10/31/1993 FY94: \$0 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
 H M CHEUNG LERC/T K GLASGOW 47-Materials Engr

NCC 3-283 University of Akron 6777
 SHOCK POSITION SENSING: THEORY, EXPERIMENT AND DES IGN
Period Obligations
 11/17/1992-12/31/1994 FY94: \$57,971 TOTAL: \$107,971
Prin. Invest. NASA Tech. Officer CASE Category
 S I HARIHARAN LERC/G ADAUIOVSKY 45-Elec Engr

NCC 3-314 University of Akron 6778
 MICROEMULSION ROUTE TO MODIFIED MICROPOROUS CERAMI C
 MATERIALS: PROOF OF PRINCIPLE EXPERIMENTS
Period Obligations
 07/16/1993-10/14/1994 FY94: \$0 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
 H M CHEUNG LERC/L A GREENBUER-SENG 47-Materials Engr

NCC 3-335 University of Akron 6779
 ELEVATED TEMPERATURE IMPACE TESTING OF FAN CONTAIN MENT
 MATERIAL/STRUCTURAL CONCEPTS
Period Obligations
 01/24/1994-01/23/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 E D VON MEERWALL LERC/J M PEREIRA 13-Physics

NGT 00-051-182 University of Akron 6780
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 09/02/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 M ELBULUK LERC/F MONTEGANI 45-Elec Engr

NGT 00-070-235 University of Akron 6781
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period Obligations
 07/15/1991-06/30/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 R K EBY HQ/F C OWENS 47-Materials Engr

NAG 1-1280 University of Cincinnati 6782
 STRUCTURAL SIMILITUDE AND SCALING LAWS - FDP
Period Obligations
 06/12/1991-06/03/1995 FY94: \$73,490 TOTAL: \$202,773
Prin. Invest. NASA Tech. Officer CASE Category
 G J SIMITSES LARC/J H STARNES 41-Aero Engr

NAG 1-1418 University of Cincinnati 6783
 VIBRATION ISOLATION FOR FLEXIBLE SPACE STRUCTURES: A
 ZERO-BASED APPROACH
Period Obligations
 04/24/1992-04/26/1995 FY94: \$23,000 TOTAL: \$97,805
Prin. Invest. NASA Tech. Officer CASE Category
 T WILLIAMS LARC/P G MAGHAMI 42-Astro Engr

NAG 1-1553 University of Cincinnati 6784
 RNS APPLICATIONS FOR INTERNAL INTERACTING SUB - AND
 SUPERSONIC FLOWS NLPN 93-833
Period Obligations
 11/19/1993-11/18/1995 FY94: \$59,497 TOTAL: \$59,497
Prin. Invest. NASA Tech. Officer CASE Category
 S G RUBIN LARC/J J KORTE 41-Aero Engr

NAG 3-397 University of Cincinnati 6785
 GLOBAL RELAXATRIION WITH THE PNS EQUATIONS FOR INTERNAL
 FLOWS
Period Obligations
 02/08/1983-02/28/1995 FY94: \$21,437 TOTAL: \$249,635
Prin. Invest. NASA Tech. Officer CASE Category
 S G RUBIN LERC/J J ADAMCZYK 41-Aero Engr

NAG 3-852 University of Cincinnati 6786
 OPTICAL WAVEGUIDE TECHNOLOGY UTILIZING SILICON SUB
 STRATES FOR SENSOR APPLICATIONS
Period Obligations
 12/23/1987-01/09/1995 FY94: \$55,000 TOTAL: \$350,000
Prin. Invest. NASA Tech. Officer CASE Category
 J T BOYD LERC/G BEHEIM 13-Physics
 H JACKSON

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAG 3-1173 University of Cincinnati 6787
GRAD EDU AND RES PROG FOR COMPUT SIM OF AEROSPACE PR
OP SYS:STRUC WITH MULTI-DIS FIN ELEMENTS
Period Obligations
05/30/1990-06/30/1994 FY94: \$0 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
A H NAYFEH LERC/C C CHAMIS 41-Aero Engr
G J SIMITSES LERC/D A HOPKINS

NAG 3-1174 University of Cincinnati 6788
GRADUATE EDUCATIONAL AND RESEARCH PROGRAM IN EXPERT
COMPUTATIONAL SIMULATION OF AEROSPACE PROP SYS
Period Obligations
05/30/1990-06/30/1995 FY94: \$0 TOTAL: \$149,904
Prin. Invest. NASA Tech. Officer CASE Category
A H NAYFEH LERC/L BERKE 41-Aero Engr
G J SIMITSES LERC/C C CHAMIS

NAG 3-1175 University of Cincinnati 6789
GRADUATE EDUCATIONAL AND RESEARCH PROGRAM FOR COMPUT
ATIONAL SIMULATION OF AEROSPACE PROPULSION STRUC
Period Obligations
05/30/1990-06/30/1995 FY94: \$0 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
A H NAYFEH LERC/C C CHAMIS 41-Aero Engr
G J SIMITSES LERC/P L MURTHY

NAG 3-1178 University of Cincinnati 6790
RNS PROCEDURES FOR UNSTEADY INLET FLOW
Period Obligations
06/07/1990-04/30/1995 FY94: \$50,000 TOTAL: \$164,583
Prin. Invest. NASA Tech. Officer CASE Category
S G RUBIN LERC/T J BENSON 41-Aero Engr
P K KHOSLA

NAG 3-1188 University of Cincinnati 6791
M2SE SUMMER INSTITUTE AND UNDERGRADUATE STUDY
Period Obligations
07/27/1990-09/12/1995 FY94: \$42,000 TOTAL: \$273,647
Prin. Invest. NASA Tech. Officer CASE Category
E N PRATHER LERC/R F LAWRENCE 99-Multi-Discip

NAG 3-1213 University of Cincinnati 6792
AN INVESTIGATION FO BLEED CONFIGURATIONS AND THEIR E
FFECTS ON SHOCK WAVE/BOUNDARY LAYER INTERACTIONS
Period Obligations
10/29/1990-01/25/1995 FY94: \$53,403 TOTAL: \$205,819
Prin. Invest. NASA Tech. Officer CASE Category
A HAMED LERC/J D SAUNDERS 41-Aero Engr

NAG 3-1392 University of Cincinnati 6793
LIQUID METAL MICRO HEAT PIPES FOR SPACE RADIATOR A
PPLICATIONS
Period Obligations
12/22/1992-01/09/1995 FY94: \$55,000 TOTAL: \$93,887
Prin. Invest. NASA Tech. Officer CASE Category
F M GERNER LERC/K W BAKER 46-Mech Engr
H T HENDERSON

NAG 3-1472 University of Cincinnati 6794
PARALLELIZATION OF THE IMPLICIT RPLUS ALGORITHM
Period Obligations
03/29/1993-02/08/1995 FY94: \$20,390 TOTAL: \$40,787
Prin. Invest. NASA Tech. Officer CASE Category
P D ORKWIS LERC/D R REDDY 41-Aero Engr

NAG 3-1527 University of Cincinnati 6795
A GRADUATE EDUCATIONAL AND RESEARCH PROGRAM FOR COMP
UTATIONAL SIMULATION OF AEROSPACE PROPULSION SYS
Period Obligations
09/09/1993-09/06/1995 FY94: \$74,994 TOTAL: \$99,992
Prin. Invest. NASA Tech. Officer CASE Category
A H NAYFEH LERC/C C CHAMIS 41-Aero Engr
G J SIMITSES LERC/L BERKE

NAG 3-1546 University of Cincinnati 6796
PRELIMINARY C++ CLASS DEFINITIONS FOR OBJECT-ORIENTED
ENGINE SIMULATION
Period Obligations
11/05/1993-11/04/1994 FY94: \$59,209 TOTAL: \$59,209
Prin. Invest. NASA Tech. Officer CASE Category
B WALKER LERC/G FOLLEN 41-Aero Engr
P KHOSLA

NAG 3-1555 University of Cincinnati 6797
GROWTH OF BULK SIC CRYSTALS BY MODIFIED CVD TECHN
QUES
Period Obligations
12/14/1993-12/13/1994 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
A J STECKI LERC/D J LARKIN 45-Elec Engr

NAG 3-1596 University of Cincinnati 6798
COMPOSITIONAL EFFECTS ON PHASE AND MICROSTRUCTURE
INSTABILITIES IN ADVANCED NICKEL BASED SUPERALLOYS
Period Obligations
07/13/1994-07/12/1995 FY94: \$24,741 TOTAL: \$24,741
Prin. Invest. NASA Tech. Officer CASE Category
V K VASUDEVAN LERC/R V MINER 47-Materials Engr
LERC/M V NATHAL

NAG 5-1770 University of Cincinnati 6799
VARIABLE EXTINCTION IN HOT STARS WITH CIRCUMSTELLA R
DUST
Period Obligations
09/17/1991-09/30/1993 FY94: \$0 TOTAL: \$27,218
Prin. Invest. NASA Tech. Officer CASE Category
M L SLTKO GSFC/D WEST 11-Astronomy

NAG 9-717 University of Cincinnati 6800
REDUCTION ON ORBIT DATA FOR MASS PROPERTIES DETERM
INATION
Period Obligations
09/28/1993-09/01/1994 FY94: \$0 TOTAL: \$15,958
Prin. Invest. NASA Tech. Officer CASE Category
T W WILLIAMS JSC/S H GOLDSTEIN 41-Aero Engr

NAG 9-766 University of Cincinnati 6801
ANALYSIS OF SAFER ON ORBIT DATA/EVA MANEUVERING SY
STEMS
Period Obligations
09/27/1994-06/30/1995 FY94: \$16,164 TOTAL: \$16,164
Prin. Invest. NASA Tech. Officer CASE Category
T WILLIAMS JSC/C HESS 42-Astro Engr

NAGW 1407 University of Cincinnati 6802
UNIVERSITY SPACE ENGINEERING RESEARCH CENTER
Period Obligations
08/17/1988-10/31/1994 FY94: \$1,324,500 TOTAL: \$7,955,924
Prin. Invest. NASA Tech. Officer CASE Category
L M GALES HQ/S C HARTMAN 49-Engr, NEC

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAGW 3230 University of Cincinnati 6803
 NAGW-3230/UNIV CINCINNATI/ASTRONOMY IN THE CLASSROOM II
Period Obligations
 11/02/1992-07/31/1994 FY94: \$0 TOTAL: \$4,851
Prin. Invest. NASA Tech. Officer CASE Category
 M L SITKO HQ/L LAPIANA 11-Astronomy
 HQ/G P NEWTON

NCC 3-237 University of Cincinnati 6811
 NUMERICAL SIMULATION OF PROPULSION SYSTEM'S TRANSIENT
 RESPONSE TO VARI IN THE COMPRESS SYS AND ENVIR
Period Obligations
 12/11/1991-12/31/1993 FY94: \$0 TOTAL: \$100,778
Prin. Invest. NASA Tech. Officer CASE Category
 A HAMED LERC/L D NICHOLS 41-Aero Engr

NAGW 3307 University of Cincinnati 6804
 NAGW-3307/UNIV CINCINNATI/ORDOVICIAN BIODIVERSITY:
 GEOGRAPHY AND ENVIRONMENT
Period Obligations
 12/31/1992-11/30/1994 FY94: \$48,095 TOTAL: \$101,893
Prin. Invest. NASA Tech. Officer CASE Category
 A MILLER HQ/J D RUMMEL 32-Geological Sci

NCC 3-252 University of Cincinnati 6812
 DESIGN AND DEVELOPMENT OF AN INTEGRATED OEIC RECEIVE R
 FOR A PHASED ARRAY ANTENNA
Period Obligations
 02/28/1992-04/25/1995 FY94: \$142,244 TOTAL: \$266,967
Prin. Invest. NASA Tech. Officer CASE Category
 K P ROENKER LERC/R R KUNATH 45-Elec Engr

NAG10-124 University of Cincinnati 6805
 RESEARCH FUSION AND REDUNDANCY MANAGEMENT FOR HEALTH
 MONITORING ARRAYS
Period Obligations
 07/01/1993-01/31/1994 FY94: \$0 TOTAL: \$52,757
Prin. Invest. NASA Tech. Officer CASE Category
 H T THURMAN KSC/N SLIWA 22-Computer Science
 H FAN

NCC 3-282 University of Cincinnati 6813
 NON-INTRUSIVE SPRAY COMBUSTION MEASUREMENTS
Period Obligations
 11/19/1992-11/21/1994 FY94: \$37,000 TOTAL: \$63,856
Prin. Invest. NASA Tech. Officer CASE Category
 S JENG LERC/D L BULZAN 41-Aero Engr

NCA 2-831 University of Cincinnati 6806
 IDENTIFICATION OF CLOSED LOOP FEEDBACK MODELS
Period Obligations
 07/15/1993-08/31/1994 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. NASA Tech. Officer CASE Category
 S J SHELLEY ARC/L C FREUDINGER 41-Aero Engr
 A W PHILLIPS

NCC 3-308 University of Cincinnati 6814
 ARTIFICIAL NEURAL NETWORK BASED MODELS FOR SSME SE NSOR
 VALIDATION
Period Obligations
 06/14/1993-11/02/1994 FY94: \$10,534 TOTAL: \$20,085
Prin. Invest. NASA Tech. Officer CASE Category
 P DHAWAN LERC/J F ZAKRAJSEK 49-Engr, NEC

NCC 1-181 University of Cincinnati 6807
 PARAMETER IDENTIFICATION FOR NONLINEAR AIRCRAFT
 DYNAMICS BY EXTENDED KALMAN FILTER METHODS
Period Obligations
 06/25/1993-06/13/1994 FY94: \$16,718 TOTAL: \$36,718
Prin. Invest. NASA Tech. Officer CASE Category
 B K WALKER LARC/P C MURPHY 41-Aero Engr

NCCW 35 University of Cincinnati 6815
 TANK PRESSURE/NCCW35
Period Obligations
 02/16/1994-01/31/1995 FY94: \$42,525 TOTAL: \$42,525
Prin. Invest. NASA Tech. Officer CASE Category
 J M ALBAYYARI HQ/M NALL 13-Physics

NCC 2-669 University of Cincinnati 6808
 ADVANCED TRAJECTORY ANALYSIS WITH APPLICATION TO AIR
 TRAFFICE CONTROL
Period Obligations
 05/25/1990-12/31/1993 FY94: \$0 TOTAL: \$145,581
Prin. Invest. NASA Tech. Officer CASE Category
 G L SLATER ARC/T J DAVIS 41-Aero Engr
 ARC/H ERZBERGER

NGT 00-010-014 University of Cincinnati 6816
 NGT-10014/UNIV CINCINNATI; AEROSPACE ENGINEERING C
 URRICULUM FOR THE 21ST CENTURY
Period Obligations
 11/17/1993-09/30/1994 FY94: \$24,999 TOTAL: \$24,999
Prin. Invest. NASA Tech. Officer CASE Category
 G J SIMITSES HQ/E T SCHWARTZ 49-Engr, NEC

NCC 2-5096 University of Cincinnati 6809
 DEVELOPMENT OF A VORTICITY-VELOCITY NAVIER-STOKES
 FORMULATION FOR THE STUDY OF COMPRESSIBILITY EFFEC
Period Obligations
 08/18/1994-08/31/1995 FY94: \$28,572 TOTAL: \$28,572
Prin. Invest. NASA Tech. Officer CASE Category
 K N GHIA ARC/D KWAK 41-Aero Engr
 U GHIA ARC/S E ROGERS

NGT 00-010-021 University of Cincinnati 6817
 NGT-10021/UNIV CINCINNATI/MULTIDISCIPLINARY DESIGN AND
 ANALYSIS FELLOWSHIP PROGRAM
Period Obligations
 12/02/1993-03/31/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 A HAMED HQ/G S SEIDEL 41-Aero Engr
 HQ/J R FACEY

NCC 3-33 University of Cincinnati 6810
 III-V COMPOUND SEMICONDUCTOR TECHNOLOGY
Period Obligations
 08/02/1983-09/30/1994 FY94: \$0 TOTAL: \$844,261
Prin. Invest. NASA Tech. Officer CASE Category
 V J KAPOOR LERC/J POUCH 19-Phys Sci, NEC
 J E DICKMAN LERC/R F LEONARD

NGT 00-050-416 University of Cincinnati 6818
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 07/18/1989-08/31/1993 FY94: \$0 TOTAL: \$62,000
Prin. Invest. NASA Tech. Officer CASE Category
 K N GHIA HQ/F C OWENS 49-Engr, NEC

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NGT 00-050-712 University of Cincinnati 6819
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/13/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
N GAYARAMAN HQ/F C OWENS 47-Materials Engr

NGT 00-050-982 University of Cincinnati 6820
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/11/1992-06/30/1995 FY94: \$11,000 TOTAL: \$55,000
Prin. Invest. NASA Tech. Officer CASE Category
R Y LIN LERC/F MONTEGANI 47-Materials Engr

NGT 00-051-202 University of Cincinnati 6821
GRAD STUDENT RESEARCHERS PROGRAM
Period Obligations
04/25/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
S M JENG MSFC/F SIX 41-Aero Engr

NGT 00-051-234 University of Cincinnati 6822
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
V J KAPOOR LERC/F MONTEGANI 45-Elec Engr

NGT 00-051-320 University of Cincinnati 6823
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/08/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
B WALKER LERC/F MONTEGANI 41-Aero Engr

NGT 00-051-367 University of Cincinnati 6824
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/16/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
S A KHAN HQ/G LESANE 51-Biological Sci

NGT 00-070-168 University of Cincinnati 6825
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
08/06/1990-05/31/1994 FY94: \$0 TOTAL: \$88,000
Prin. Invest. NASA Tech. Officer CASE Category
S G RUBIN HQ/F C OWENS 45-Elec Engr

NGT 00-070-278 University of Cincinnati 6826
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
08/11/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
S G RUBIN LERC/F MONTEGANI 42-Astro Engr

NAG 1-1327 University of Dayton 6827
DETERMINATION OF OPERATIONAL AND SUPPORT REQUIRE-
MENTS AND COSTS DURING CONCEPTUAL DESIGN OF SPACE
Period Obligations
07/26/1991-12/31/1994 FY94: \$73,577 TOTAL: \$212,273
Prin. Invest. NASA Tech. Officer CASE Category
C E EBELING LARC/W D MORRIS 49-Engr, NEC

NAG 3-1391 University of Dayton 6828
EVAPORATION FROM A MENISCUS WITHIN A CAPILLARY TUB E IN
MICROGRAVITY
Period Obligations
12/23/1992-11/30/1995 FY94: \$201,739 TOTAL: \$332,824
Prin. Invest. NASA Tech. Officer CASE Category
K P HALLINAN LERC/R L THOMPSON 19-Phys Sci, NEC
J ERVIN

NAG 9-600 University of Dayton 6829
COLLECTION AND PROCESSING OF DAMAGE TOLERANT DESIG N
DATA FOR NON-AEROSPACE STRUCTURAL MATERIALS
Period Obligations
06/01/1992-06/01/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
J P GALLAGHER JSC/R G FORMAN 46-Mech Engr

NAS 3-27323 University of Dayton 6830
UPGRADE TO A COMPUTER CONTROLLED MECHANICAL TEST S
YSTEM
Period Obligations
05/19/1994-08/17/1994 FY94: \$81,205 TOTAL: \$81,205
Prin. Invest. NASA Tech. Officer CASE Category
G HARTMAN LERC/I J TELESMA 47-Materials Engr
D BUCHANAN LERC/A M CALAMINO

NAS 5-31661 University of Dayton 6831
VERIFICATION AND ANALYSIS OF UPPER ATMOSPHERIC DATA
Period Obligations
11/01/1989-10/31/1994 FY94: \$95,267 TOTAL: \$595,189
Prin. Invest. NASA Tech. Officer CASE Category
J K LUERS GSFC/F J SCHMIDLIN 31-Atmos Sci

NGT 00-051-089 University of Dayton 6832
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/02/1994-06/30/1996 FY94: \$22,000 TOTAL: \$42,250
Prin. Invest. NASA Tech. Officer CASE Category
K P HALLINAN HQ/D A HOLLAND 46-Mech Engr

NGT 00-051-207 University of Dayton 6833
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/15/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
T J KELLY MSFC/F SIX 46-Mech Engr

NAG 3-72 University of Toledo 6834
NUMERICAL SIMULATION OF INTERNAL HEAT TRANSFERS
PHENOMENA OCCURRING DURING DEICING OF AIRCRAFT COMPO
Period Obligations
05/06/1980-01/17/1995 FY94: \$120,999 TOTAL: \$626,577
Prin. Invest. NASA Tech. Officer CASE Category
K J DEWITT LERC/M VARGAS 41-Aero Engr
T G KEITH LERC/J J REINMANN

NAG 3-157 University of Toledo 6835
INTERFERENCE SUSCEPTIBILITY OF DIGITAL TV SYSTEMS
Period Obligations
01/08/1981-12/13/1993 FY94: \$0 TOTAL: \$705,229
Prin. Invest. NASA Tech. Officer CASE Category
S C KWATRA LERC/G H STEVENS 22-Computer Science

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NAG 3-577		University of Toledo		6836
FLUID PHYSICS PHENOMENA OF RESISTOJET THRUSTERS				
<i>Period</i>		<i>Obligations</i>		
10/02/1984-02/10/1995	FY94: \$25,000	TOTAL: \$271,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
K J DEWITT	LERC/W E MORREN	19-Phys Sci, NEC		
T G KEITH	LERC/P F PENKO			
NAG 3-742		University of Toledo		6837
OPTIMIZATION OF PROPFAN BLADES WITH DYNAMIC CONSTRAINTS				
<i>Period</i>		<i>Obligations</i>		
08/25/1986-12/31/1993	FY94: \$0	TOTAL: \$376,603		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T G KEITH	LERC/G L STEFKO	41-Aero Engr		
D V MURTHY	LERC/L J KIRALY			
NAG 3-799		University of Toledo		6838
A DIGITALLY IMPLEMENTED MULTICARRIER DEMODULATOR				
<i>Period</i>		<i>Obligations</i>		
05/17/1987-02/17/1995	FY94: \$50,000	TOTAL: \$471,154		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
S C KWATRA	LERC/J M BUDINGER	45-Elec Engr		
M M JAMALI	LERC/J L HARROLD			
NAG 3-1068		University of Toledo		6839
ADV MOD FOR AEROELAST ANALY OF PROP SYS				
<i>Period</i>		<i>Obligations</i>		
08/22/1989-06/10/1994	FY94: \$0	TOTAL: \$336,629		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T G KEITH	LERC/G L STEFKO	41-Aero Engr		
A J MAHAJAN	LERC/L J KIRALY			
NAG 3-1137		University of Toledo		6840
AEROELASTIC STABILITY AND RESPONSE OF ROTATING STRUCTURES				
<i>Period</i>		<i>Obligations</i>		
01/29/1990-11/19/1994	FY94: \$55,920	TOTAL: \$368,841		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T G KEITH JR	LERC/	41-Aero Engr		
T S REDDY				
M A BAKHLE				
NAG 3-1165		University of Toledo		6841
TURBOMACHINERY DESIGN AND PERFORMANCE ANALYSIS				
<i>Period</i>		<i>Obligations</i>		
04/13/1990-12/04/1994	FY94: \$99,438	TOTAL: \$447,947		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
K J DEWITT	LERC/J K LYTLE	42-Astro Engr		
NAG 3-1219		University of Toledo		6842
COMPUTATION OF REACTING FLOWS IN COMBUSTION PROCESSES				
<i>Period</i>		<i>Obligations</i>		
12/03/1990-12/31/1994	FY94: \$104,000	TOTAL: \$327,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T G KEITH	LERC/R W CLAUS	41-Aero Engr		
	LERC/E J MULARZ			
NAG 3-1230		University of Toledo		6843
EULER/NAVIER STOKES SOLVERS APPLIED FOR ADVANCED PROPELLER CONFIGERATIONS				
<i>Period</i>		<i>Obligations</i>		
12/17/1990-01/05/1995	FY94: \$53,621	TOTAL: \$248,115		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T G KEITH	LERC/D C JANETZKE	41-Aero Engr		
R SRIVASTAVA	LERC/L J KIRALY			
NAG 3-1234		University of Toledo		6844
AEROELASTIC ANALYSIS USING VARIOUS CFD MODELS / 52 30				
<i>Period</i>		<i>Obligations</i>		
01/07/1991-12/21/1994	FY94: \$44,110	TOTAL: \$232,214		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T G KEITH	LERC/A P KURKOU	41-Aero Engr		
M A BAKHLE	LERC/L J KIRALY			
NAG 3-1264		University of Toledo		6845
COMPUTATIONAL SIMULATION OF COMPOSITE MATERIAL BEHAVIOR				
<i>Period</i>		<i>Obligations</i>		
03/26/1991-02/03/1995	FY94: \$179,063	TOTAL: \$536,561		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
S K MITAL	LERC/P L MURTHY	49-Engr, NEC		
	LERC/C C CHAMIS			
NAG 3-1276		University of Toledo		6846
EXPERIMENTAL AND THEORETICAL INVESTIGATION OF ICING IMPACT MEASUREMENT AND PHENOMENA				
<i>Period</i>		<i>Obligations</i>		
05/15/1991-09/30/1993	FY94:	TOTAL: \$39,987		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
K C MASIULANIEC	LERC/T H BOND	41-Aero Engr		
K J DEWITT				
NAG 3-1307		University of Toledo		6847
DETAILED AND REDUCED HYDROCARBON OXIDATION CHEMISTRY				
<i>Period</i>		<i>Obligations</i>		
11/19/1991-01/26/1995	FY94: \$121,641	TOTAL: \$311,896		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
K J DEWITT	LERC/M J RABINOWITZ	12-Chemistry		
	LERC/E A LEZBERG			
NAG 3-1338		University of Toledo		6848
MIXING ENHANCEMENT OF A FREE JET BY IMPARTING SWIRL				
<i>Period</i>		<i>Obligations</i>		
03/20/1992-06/30/1994	FY94: \$0	TOTAL: \$115,135		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
K J DEWITT	LERC/K Q ZAMAN	46-Mech Engr		
J PANDA	LERC/J M ABBOTT			
NAG 3-1370		University of Toledo		6849
HYDRODYNAMIC ANALYSES AND EVALUATION OF NEW FLUID FILM BEARING CONCEPTS				
<i>Period</i>		<i>Obligations</i>		
10/06/1992-08/14/1995	FY94: \$210,500	TOTAL: \$312,500		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T G KEITH	LERC/J F WALKER	46-Mech Engr		
NAG 3-1422		University of Toledo		6850
PROCESS OPTIMIZATION VIA SOFT COMPUTING				
<i>Period</i>		<i>Obligations</i>		
12/11/1992-03/31/1995	FY94: \$20,000	TOTAL: \$40,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
K CIOS	LERC/A VARRY	47-Materials Engr		
	LERC/L BERKE			
NAG 3-1449		University of Toledo		6851
AEROELASTIC ANALYSIS OF TURBOMACHINERY FOR SPACE PROPULSION				
<i>Period</i>		<i>Obligations</i>		
01/26/1993-05/12/1995	FY94: \$148,015	TOTAL: \$228,385		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T G KEITH JR.	LERC/G L STEFKO	41-Aero Engr		

**NASA'S UNIVERSITY PROGRAM
OHIO (Continued)**

NAG 3-1466 University of Toledo 6852
 DESIGN AND MODELING OF A HIGH EFFICIENCY SILICON SOLAR CELL WITH BURIED TRAP LEVEL
Period 02/25/1993-01/30/1995 *Obligations* FY94: \$82,000 TOTAL: \$132,000
Prin. Invest. NASA Tech. Officer CASE Category
 T G KEITH LERC/I WEINBERG 46-Mech Engr
 LERC/D J FLOOD

NAG 3-1501 University of Toledo 6853
 OSCILLATORY/CHAOTIC THERMOCAPILLARY FLOW INDUCED BY RADIANT HEATING
Period 05/20/1993-05/31/1995 *Obligations* FY94: \$20,269 TOTAL: \$36,404
Prin. Invest. NASA Tech. Officer CASE Category
 K J DEWITT LERC/R L THOMPSON 19-Phys Sci, NEC

NAG 3-1550 University of Toledo 6854
 SHOCK OSCILLATION AND ITS RELATION TO THE SCREECH AND BROADBAND NOISE IN UNDEREXPANDED FREE JETS: AN EXPERIMENT
Period 12/14/1993-12/13/1994 *Obligations* FY94: \$81,806 TOTAL: \$81,806
Prin. Invest. NASA Tech. Officer CASE Category
 K DE WITT LERC/K Q ZUMAN 46-Mech Engr
 J PANDA

NAG 3-1576 University of Toledo 6855
 STUDY OF A HIGH VOLTAGE ION ENGINE POWER SUPPLY
Period 02/28/1994-02/27/1995 *Obligations* FY94: \$45,020 TOTAL: \$45,020
Prin. Invest. NASA Tech. Officer CASE Category
 T J STUART LERC/J A HAMLEY 45-Elec Engr
 R J KING

NAG 5-954 University of Toledo 6856
 RESEARCH RELATIVE AND INTERACTING OF SEVERAL SELECTED BINARY STAR SYSTEMS
Period 09/01/1987-11/14/1992 *Obligations* FY94: \$0 TOTAL: \$48,724
Prin. Invest. NASA Tech. Officer CASE Category
 B W BOPP GSFC/D WEST 11-Astronomy
 S B PARSONS

NAG 5-2460 University of Toledo 6857
 MAIN SEQUENCE O STARS IN NGC 6231: ENHANCED WINDS
Period 01/11/1994-01/14/1995 *Obligations* FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. NASA Tech. Officer CASE Category
 N MORRISON GSFC/D WEST 11-Astronomy

NAG 5-2461 University of Toledo 6858
 PULSATIONALLY INDUCED MASS-DUMPING F + B BINARIES
Period 01/11/1994-01/14/1995 *Obligations* FY94: \$1,500 TOTAL: \$1,500
Prin. Invest. NASA Tech. Officer CASE Category
 B W GSFC/D WEST 11-Astronomy

NAGW 2337 University of Toledo 6859
 ANNUAL CYCLES OF VOLATILES ON MARS
Period 05/07/1991-12/31/1992 *Obligations* FY94: \$0 TOTAL: \$59,702
Prin. Invest. NASA Tech. Officer CASE Category
 P B JAMES HQ/J BERGSTRALH 11-Astronomy

NAGW 2457 University of Toledo 6860
 OSCILLATOR STRENGTHS FOR ULTRAVIOLET ATOMIC TRANSITIONS
Period 04/11/1991-02/28/1993 *Obligations* FY94: \$0 TOTAL: \$161,600
Prin. Invest. NASA Tech. Officer CASE Category
 S R FEDERMAN HQ/D HUENEMOERDER 11-Astronomy

NAGW 2794 University of Toledo 6861
 PHOTOPHYSICS AND HYDROGEN PROCESSING OF INTERSTELLAR CARBON SOLIDS
Period 12/18/1991-11/30/1994 *Obligations* FY94: \$0 TOTAL: \$127,298
Prin. Invest. NASA Tech. Officer CASE Category
 A N WITT HQ/L J CAROFF 11-Astronomy

NAGW 3168 University of Toledo 6862
 RADIATIVE TRANSFER ANALYSIS OF DUSTY ASTRONOMICAL SYSTEMS
Period 08/11/1992-04/30/1995 *Obligations* FY94: \$91,269 TOTAL: \$253,801
Prin. Invest. NASA Tech. Officer CASE Category
 A WITT HQ/G R RIEGLER 11-Astronomy

NAGW 3240 University of Toledo 6863
 NAGW-3240/UNIV TOLEDO/ASTRONOMY EDUCATION SYMPOSIUM BASED ON THE UT-SPICA MODEL
Period 10/21/1992-07/31/1994 *Obligations* FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
 A N WITT HQ/L LAPIANA 11-Astronomy

NAGW 3840 University of Toledo 6864
 NAGW-3840/B UNIV. TOLEDO: OSCILLATOR STRENGTHS FOR ULTRAVIOLET ATOMIC TRANSITIONS
Period 12/21/1993-12/31/1994 *Obligations* FY94: \$67,000 TOTAL: \$67,000
Prin. Invest. NASA Tech. Officer CASE Category
 S R FEDERMAN HQ/R V STACHNIK 11-Astronomy
 HQ/E J WEILER

NCA 2-645 University of Toledo 6865
 ULTRAVIOLET SPECTRA OF HOT STARS
Period 08/01/1991-08/31/1994 *Obligations* FY94: \$0 TOTAL: \$8,570
Prin. Invest. NASA Tech. Officer CASE Category
 L S ANDERSON ARC/E ERICKSON 11-Astronomy

NCC 3-34 University of Toledo 6866
 MASS TRANSPORT PHENOMENA BETWEEN BUBBLES AND DISSOLVED GASES IN LIQUID UNDER REDUCED GRAVITY CONDITIONS
Period 10/24/1983-08/31/1993 *Obligations* FY94: \$0 TOTAL: \$478,391
Prin. Invest. NASA Tech. Officer CASE Category
 K J DEWITT LERC/A T CHAI 49-Engr, NEC
 C N YUNG

NCC 3-120 University of Toledo 6867
 DEVELOPMENT AND APPLICATION OF VISCOPLASTIC MODELS IN NONLINEAR STRUCTURAL ANALYSIS
Period 12/12/1988-12/01/1994 *Obligations* FY94: \$90,000 TOTAL: \$570,207
Prin. Invest. NASA Tech. Officer CASE Category
 T G KEITH LERC/S M ARNOLD 42-Astro Engr
 LERC/R E KIELB

NASA'S UNIVERSITY PROGRAM
OHIO (Continued)

NCC 3-126 University of Toledo 6868
 MICROSTRIP ANTENNA ARRAYS W/ PARASITIC ELEMENTS
Period Obligations
 01/30/1989-08/14/1995 FY94: \$24,984 TOTAL: \$209,801
Prin. Invest. NASA Tech. Officer CASE Category
 K F LEE LERC/R O LEE 45-Elec Engr

NCC 3-171 University of Toledo 6869
 RAREFIED FLOW OF GASES IN INTERNAL AND EXTERNAL GEOMETRIES
Period Obligations
 03/27/1990-11/30/1994 FY94: \$83,616 TOTAL: \$344,897
Prin. Invest. NASA Tech. Officer CASE Category
 K J DEWITT LERC/R M STUBBS 42-Astro Engr
 C H CHUNG
 D R JENG

NCC 3-193 University of Toledo 6870
 ADVANCED PROPULSION SYSTEM STUDIES IN HIGH SPEED RESEARCH
Period Obligations
 12/19/1990-04/30/1994 FY94: \$47,282 TOTAL: \$304,897
Prin. Invest. NASA Tech. Officer CASE Category
 K J DEWITT LERC/L H FISHBACH 41-Aero Engr

NCC 3-207 University of Toledo 6871
 NUMERICAL SIMULATION OF A HIGH BY-PASS FAN IN A JET ENGINE
Period Obligations
 02/15/1991-02/14/1995 FY94: \$38,120 TOTAL: \$189,918
Prin. Invest. NASA Tech. Officer CASE Category
 A A AFJEH LERC/G J FOLLEN 41-Aero Engr

NCC 3-229 University of Toledo 6872
 LOW REYNOLDS NUM MULTI-TIME-SCALE TURB MODEL AND ITS APPL TO UNSTEADY AND TRANSITIONARY TURBULENT FLOWS
Period Obligations
 08/29/1991-02/07/1995 FY94: \$97,393 TOTAL: \$304,514
Prin. Invest. NASA Tech. Officer CASE Category
 K J DEWITT LERC/R M STUBBS 42-Astro Engr
 S W KIM LERC/J M ABBOTT

NCC 3-247 University of Toledo 6873
 AEROELASTIC ANALYSIS OF TURBOMACHINERY FOR SPACE PROPULSION
Period Obligations
 01/27/1992-01/12/1993 FY94: TOTAL: \$72,614
Prin. Invest. NASA Tech. Officer CASE Category
 T G KEITH LERC/G L STEFKO 41-Aero Engr
 D V MURTHY LERC/L J KIRALY

NCC 3-248 University of Toledo 6874
 DEVELOPMENT OF COMPUTATIONAL TECHNIQUES FOR THE NONLINEAR ANALYSIS OF COMP STRUCTURES AT HI TEMP
Period Obligations
 01/16/1992-10/31/1994 FY94: \$71,000 TOTAL: \$194,000
Prin. Invest. NASA Tech. Officer CASE Category
 T WILT LERC/S M ARNOLD 41-Aero Engr

NCC 3-260 University of Toledo 6875
 DEVELOPMENT OF SILICON-GERMANIUM TECHNOLOGY FOR MICROWAVE SENSING APPLICATIONS
Period Obligations
 03/27/1992-12/31/1994 FY94: \$43,191 TOTAL: \$175,475
Prin. Invest. NASA Tech. Officer CASE Category
 K J DE WITT LERC/R A MENU 45-Elec Engr
 P G YOUNG LERC/S ALTEROVITZ

NCC 3-279 University of Toledo 6876
 ACCELERATED TESTING TECHNIQUES FOR SPACE MECHANISMS
Period Obligations
 10/12/1992-12/26/1994 FY94: \$28,000 TOTAL: \$53,000
Prin. Invest. NASA Tech. Officer CASE Category
 T G KEITH LERC/R L FUSARO 46-Mech Engr
 LERC/D A ROHN

NCC 3-288 University of Toledo 6877
 ENVIRONMENTAL EFFECTS ON BOUNDARY LAYERS TRANSITION CHARACTERISTICS
Period Obligations
 12/11/1992-02/01/1995 FY94: \$75,000 TOTAL: \$142,550
Prin. Invest. NASA Tech. Officer CASE Category
 K J DEWITT LERC/F F SIMON 46-Mech Engr
 K H SOHN

NCC 3-291 University of Toledo 6878
 EFFECT OF CAVITATION ON JOURNAL BEARING DYNAMIC CHARACTERISTICS
Period Obligations
 12/20/1992-03/02/1995 FY94: \$73,000 TOTAL: \$141,000
Prin. Invest. NASA Tech. Officer CASE Category
 T G KEITH LERC/D E BREWE 46-Mech Engr
 LERC/G A BOBULA

NCC 3-332 University of Toledo 6879
 ADVANCED MODELS FOR AERO-STRUCTURES INTERACTION ANALYSIS OF PROPULSION SYSTEMS
Period Obligations
 12/20/1993-12/19/1994 FY94: \$79,886 TOTAL: \$79,886
Prin. Invest. NASA Tech. Officer CASE Category
 T G KEITH LERC/G L STEFKO 41-Aero Engr
 A J MAHAJAN

NCC 3-333 University of Toledo 6880
 AN APPLICATION OF SYSTEMS REQUIREMENTS MODELING TO A SHUTTLE FLIGHT EXPERIMENT PROJECT
Period Obligations
 01/04/1994-11/04/1994 FY94: \$23,260 TOTAL: \$23,260
Prin. Invest. NASA Tech. Officer CASE Category
 W L SCHELLER II LERC/G G SADLER 49-Engr, NEC

NCC 3-281 Wilberforce University 6881
 NASA/WILBERFORCE COLLABORATIVE PROGRAM RESEARCH INSTITUTE FOR TECHNICAL CAREERS
Period Obligations
 10/21/1992-10/31/1994 FY94: \$431,556 TOTAL: \$859,188
Prin. Invest. NASA Tech. Officer CASE Category
 R L GLENN LERC/A F HEPP 19-Phys Sci, NEC
 E ASIKELE LERC/J M EARLS

NAG 3-793 Wittenberg University 6882
 RADIATION EFFECTS ON POWER TRANSISTOR PERFORMANCES
Period Obligations
 03/23/1987-06/15/1994 FY94: \$0 TOTAL: \$362,290
Prin. Invest. NASA Tech. Officer CASE Category
 A J FRASCA LERC/G E SCHWARZE 13-Physics

NAG 3-1233 Wright State University 6883
 THERMODYNAMIC STUDIES FOR Ti-AL ALLOYS CONTAINING DISSOLVED OXYGEN / 5160
Period Obligations
 01/03/1991-06/30/1994 FY94: \$0 TOTAL: \$69,062
Prin. Invest. NASA Tech. Officer CASE Category
 G M MEHROTRA LERC/N S JACOBSON 47-Materials Engr
 LERC/A K MISRA

**NASA'S UNIVERSITY PROGRAM
OHIO (Continued)**

NAG 3-1489 Wright State University 6884
RELIABILITY BASED STRUCTURAL OPTIMIZATION
Period Obligations
04/16/1993-08/21/1995 FY94: \$50,000 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
R GRANDHI LERC/D A HOPKINS 46-Mech Engr

NGT36-24790 Wright State University 6885
AEROSPACE MEDICINE RESIDENCY PROGRAM
Period Obligations
07/01/1978-12/31/1994 FY94: \$551,000 TOTAL: \$6,391,242
Prin. Invest. NASA Tech. Officer CASE Category
S MOHLER HQ/F D EVANS 59-Life Sci, NEC
HQ/A E NICOGOSSIAN

OKLAHOMA

NAG 3-1613 Oklahoma State University 6886
LIGHT SCATTERING STUDIES OF RELATIVE MOTIONS OF SOLID PARTICLES IN TURBULENT FLOWS
Period Obligations
07/01/1994-06/30/1995 FY94: \$70,000 TOTAL: \$70,000
Prin. Invest. NASA Tech. Officer CASE Category
P TONET LERC/D F CHAO 13-Physics
W I GOLDBURG

NAG 3-1624 Oklahoma State University 6887
COLLOIDS AND NUCLEATION
Period Obligations
06/24/1994-06/23/1995 FY94: \$47,101 TOTAL: \$47,101
Prin. Invest. NASA Tech. Officer CASE Category
B J ACKERSON LERC/G A ZIMMERLI 13-Physics

NASW 4516 Oklahoma State University 6888
NASW-4516/OKLAHOMA STATE UNIV/OPERATION AND MANAGEMEN TOF THE NASA AEROSPACE EDUCATION SERVICES PROGRA
Period Obligations
07/11/1990-03/31/ 995 FY94: \$7,005,674 TOTAL: \$25,824,116
Prin. Invest. NASA Tech. Officer CASE Category
K WIGGINS HQ/L B BILBROUGH 99-Multi-Discip
N EHRLICH

NCC 2-5021 Oklahoma State University 6889
UNSTEADY AERODYNAMICS MODELLING FOR STARS AEROSERV OELASTIC VALIDATION
Period Obligations
12/21/1993-08/31/1994 FY94: \$9,866 TOTAL: \$9,866
Prin. Invest. NASA Tech. Officer CASE Category
A ARENA ARC/K K GUPTA 41-Aero Engr

NCCW 5 Oklahoma State University 6890
NASA'S TEACHER IN SPACE PROJECT
Period Obligations
10/16/1985-11/30/1994 FY94: \$753,196 TOTAL: \$4,954,621
Prin. Invest. NASA Tech. Officer CASE Category
K WIGGINS HQ/L BILBROUGH 99-Multi-Discip

NGT 00-050-766 Oklahoma State University 6891
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/10/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
K PERRY HQ/F C OWENS 42-Astro Engr

NGT 00-050-767 Oklahoma State University 6892
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/13/1991-05/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
L BARNES HQ/F C OWENS 42-Astro Engr

NAG 1-1375 University of Oklahoma - Norman 6893
THE NONDESTRUCTIVE EVALUATION OF CARBON-CARBON COM POSITES: EFFECT OF THERMAL DEGRADATION ON MECH.BE
Period Obligations
02/14/1992-02/11/1995 FY94: \$0 TOTAL: \$61,939
Prin. Invest. NASA Tech. Officer CASE Category
R A KLINE LARC/P H JOHNSTON 19-Phys Sci, NEC
A G STRIZ

NAG 1-1643 University of Oklahoma - Norman 6894
THEORETICAL INVESTIGATION IN NON-LINEAR AERO PREDI CTION
Period Obligations
09/06/1994-03/05/1995 FY94: \$25,276 TOTAL: \$25,276
Prin. Invest. NASA Tech. Officer CASE Category
D E SMITH LARC/M J LOGAN 41-Aero Engr

NAG 3-1594 University of Oklahoma - Norman 6895
EFFECTS OF ENERGY RELEASE ON NEAR FIELD FLOW STRUC TURE OF GAS JETS
Period Obligations
06/02/1994-06/01/1995 FY94: \$94,000 TOTAL: \$94,000
Prin. Invest. NASA Tech. Officer CASE Category
A K AGRAWAL LERC/H D ROSS 46-Mech Engr
S R GOLLHALLI

NAG 5-1379 University of Oklahoma - Norman 6896
LARGE EDDY SIMULATION OF THE FIFE ATMOSPHERE
Period Obligations
04/24/1990-05/31/1994 FY94: \$0 TOTAL: \$202,447
Prin. Invest. NASA Tech. Officer CASE Category
T GAL-CHEN GSFC/F G HALL 31-Atmos Sci

NAG 5-1528 University of Oklahoma - Norman 6897
EXPLICIT GROWTH OF ICE PARTICLES IN NUMERICAL MODE LS OF CUMULUS CLOUDS
Period Obligations
04/09/1991-04/14/1994 FY94: \$0 TOTAL: \$140,989
Prin. Invest. NASA Tech. Officer CASE Category
Y L KOGAN GSFC/J SIMPSON 31-Atmos Sci

NAG 5-2389 University of Oklahoma - Norman 6898
CARBON PRODUCTION IN INTERMEDIATE-MASS STARS
Period Obligations
10/07/1993-10/14/1994 FY94: \$29,700 TOTAL: \$29,700
Prin. Invest. NASA Tech. Officer CASE Category
R B HENRY GSFC/D WEST 11-Astronomy

NAG 5-2558 University of Oklahoma - Norman 6899
ADVANCED SILICON MICROSTRIPE STUDIES
Period Obligations
03/17/1994-03/31/1995 FY94: \$12,000 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
G R KALBFLEISCH GSFC/L M BARBIER 11-Astronomy

NASA'S UNIVERSITY PROGRAM **OKLAHOMA (Continued)**

NAG 8-137 University of Oklahoma - Norman 6900
A DECISION SUPPORT SYSTEM FOR TOLERANCE ALLOCATION
Period Obligations
08/21/1989-09/04/1993 FY94: TOTAL: \$171,890
Prin. Invest. NASA Tech. Officer CASE Category
P S PULAT MSFC/K R FERNANDEZ 46-Mech Engr
S RAMAN MSFC/A GILLIS

NAG 8-922 University of Oklahoma - Norman 6901
ANALYSIS OF SURFACE ENERGY AND LAND-ATMOSPHERE WATER
BUDGET MEASUREMENTS FOR THE CAPE FIEL PROGRA
Period Obligations
07/06/1992-07/31/1994 FY94: \$0 TOTAL: \$87,725
Prin. Invest. NASA Tech. Officer CASE Category
C E DUCHON MSFC/S J GOODMAN 31-Atmos Sci

NAGW 2765 University of Oklahoma - Norman 6902
THE APPLICATION OF STABLE ISOTOPES FOR DETERMINING THE
ORIGIN(S) OF INDIVIDUAL AMINO ACID ENANTIOMER
Period Obligations
11/08/1991-05/31/1993 FY94: \$0 TOTAL: \$85,079
Prin. Invest. NASA Tech. Officer CASE Category
M H ENGEL HQ/J D RUMMEL 12-Chemistry

NAGW 2999 University of Oklahoma - Norman 6903
QUANTITATIVE ANALYSIS OF SUPERNOVA ULTRAVIOLET SPECTRA
Period Obligations
03/10/1992-01/31/1995 FY94: \$71,000 TOTAL: \$171,000
Prin. Invest. NASA Tech. Officer CASE Category
D R BRANCH HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3031 University of Oklahoma - Norman 6904
NAGW-3031/UNIV OKLAHOMA/STABILITY OF EARLY MARTIAN
CLIMATES: CONSEQUENCES FOR VOLATILE DISTRIBUTION
Period Obligations
04/06/1992-12/31/1994 FY94: \$0 TOTAL: \$70,000
Prin. Invest. NASA Tech. Officer CASE Category
S POSTAWKO HQ/H C BRINTON 32-Geological Sci

NAS 3-26957 University of Oklahoma - Norman 6905
ACTS PROPAGATION EXPERIMENTS
Period Obligations
05/13/1993-10/31/1995 FY94: \$125,217 TOTAL: \$215,217
Prin. Invest. NASA Tech. Officer CASE Category
R K CRANE LERC/R J GUNDERMAN 41-Aero Engr

NGT 00-040-052 University of Oklahoma - Norman 6906
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
09/03/1991-02/28/1995 FY94: \$170,000 TOTAL: \$663,000
Prin. Invest. NASA Tech. Officer CASE Category
K L HOVING HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-051-110 University of Oklahoma - Norman 6907
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/22/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R A KLINE LARC/E PRIOR 46-Mech Engr

NAG 1-1579 University of Tulsa 6908
SMART PLC INTELLIGENT CONTROLLER
Period Obligations
12/20/1993-12/31/1994 FY94: \$54,509 TOTAL: \$54,509
Prin. Invest. NASA Tech. Officer CASE Category
M TIMMERMAN LARC/R W WILLS 22-Computer Science
LARC/W H BRYANT

NAG 8-1005 University of Tulsa 6909
JOVE
Period Obligations
03/22/1994-05/31/1995 FY94: \$82,310 TOTAL: \$82,310
Prin. Invest. NASA Tech. Officer CASE Category
L DUNCAN MSFC/F SIX 12-Chemistry

NCC 3-338 University of Tulsa 6910
RESIDUAL STRESS MEASUREMENTS AND DEBONDING ANALYSIS OF
THERMAL BARRIER COATINGS
Period Obligations
02/17/1994-02/16/1995 FY94: \$19,981 TOTAL: \$19,981
Prin. Invest. NASA Tech. Officer CASE Category
E F RYBICKI LERC/W J BRINDUEY 47-Materials Engr
J R SHADLEY LERC/R A MILLER

OREGON

NAG 2-931 Oregon Graduate Institute of Science & Technology 6911
MODELS OF SPEED DISCRIMINATION
Period Obligations
09/27/1994-08/31/1995 FY94: \$38,643 TOTAL: \$38,643
Prin. Invest. NASA Tech. Officer CASE Category
M PAVEL HQ/L S STONE 59-Life Sci, NEC

NCC 2-811 Oregon Graduate Institute of Science & Technology 6912
PERCEPTION-BASED SENSOR FUSION FOR AN AUGMENTED VISION
SYSTEM
Period Obligations
07/16/1993-12/31/1994 FY94: \$54,000 TOTAL: \$245,724
Prin. Invest. NASA Tech. Officer CASE Category
M PAVEL ARC/A J AHUMADA 69-Psych, NEC
ARC/C H NULL

NAGW 3798 Oregon Health Sciences University 6913
A GRAVITY SENSITIVE PERIOD DURING FROG OOLYTE
MATURATION
Period Obligations
11/30/1993-08/31/1994 FY94: \$49,998 TOTAL: \$49,998
Prin. Invest. NASA Tech. Officer CASE Category
M DANILCHIK HQ/T W HALSTEAD 51-Biological Sci

NAG 1-1081 Oregon State University 6914
NONLINEAR STABILITY AND CONTROL STUDY OF HIGHLY
MANEUVERABLE HIGH-PERFORMANCE AIRCRAFT
Period Obligations
01/19/1990-06/30/1993 FY94: \$0 TOTAL: \$126,456
Prin. Invest. NASA Tech. Officer CASE Category
R R MOHLER LARC/A J OSTROFF 41-Aero Engr

NASA'S UNIVERSITY PROGRAM
OREGON (Continued)

NAG 1-1234 Oregon State University 6915
FIRE 2 SATELLITE OBSERVATIONS OF CIRRUS
Period Obligations
02/22/1991-03/31/1995 FY94: \$74,000 TOTAL: \$277,000
Prin. Invest. NASA Tech. Officer CASE Category
J A COAKLEY LARC/T OWENS 31-Atmos Sci

NAG 1-1263 Oregon State University 6916
CHARACTERIZATION OF CLOUDS AND ANISOTROPY OF EMITTED
AND REFLECTED RADIANCES AS PART OF CERES
Period Obligations
05/07/1991-02/28/1995 FY94: \$130,000 TOTAL: \$255,000
Prin. Invest. NASA Tech. Officer CASE Category
J A COAKLEY LARC/J W YOUNGBLOOD 31-Atmos Sci
LARC/B A WIELICKI

NAG 1-1620 Oregon State University 6917
PROGRESSIVE DAMAGE MODELING IN COMPOSITE SHELL
STRUCTURES
Period Obligations
04/19/1994-04/13/1995 FY94: \$54,735 TOTAL: \$54,735
Prin. Invest. NASA Tech. Officer CASE Category
T C KENNEDY LARC/J H STARNES 41-Aero Engr
LARC/D R AMBUR

NAG 2-630 Oregon State University 6918
IMPROVING SEARCH-BASED AI SYSTEMS
Period Obligations
03/28/1990-12/31/1992 FY94: \$0 TOTAL: \$227,687
Prin. Invest. NASA Tech. Officer CASE Category
T G DIETRICH ARC/P E FRIEDLAND 22-Computer Science

NAG 2-875 Oregon State University 6919
AN AGENT-BASED COCKPIT TASK MANAGEMENT SYSTEM
Period Obligations
12/30/1993-09/30/1994 FY94: \$129,546 TOTAL: \$129,546
Prin. Invest. NASA Tech. Officer CASE Category
K H FUNK II ARC/K M CORKER 69-Psych, NEC
ARC/F A PALMER III

NAG 5-2013 Oregon State University 6920
MODELING AND VISUALIZATION OF SOIL MOISTURE REDIST
RIBUTION
Period Obligations
07/01/1992-06/30/1993 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
R CUENCA GSFC/E T ENGMAN 39-Env Sci, NEC

NAG 5-2300 Oregon State University 6921
FLUXES OVER INHOMOGENEOUS SURFACES IN BOREAS
Period Obligations
06/30/1993-07/14/1995 FY94: \$50,000 TOTAL: \$65,000
Prin. Invest. NASA Tech. Officer CASE Category
L MAHRT GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 5-2301 Oregon State University 6922
FROM MICROSCALE TO MESOSCALE: SNOWMELT, SOIL MOIS TURE,
AND EVAPOTRANSPIRATION FROM DISTRIBUTED.
Period Obligations
06/30/1993-07/14/1994 FY94: \$50,000 TOTAL: \$70,000
Prin. Invest. NASA Tech. Officer CASE Category
D MARKS GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 5-2377 Oregon State University 6923
COUPLED ATMOSPHERIC-FOREST CANOPY-SOIL PROFILE MON
ITORING AND SIMULATION
Period Obligations
09/30/1993-09/30/1995 FY94: \$125,420 TOTAL: \$125,420
Prin. Invest. NASA Tech. Officer CASE Category
R H CUENCA GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 9-63 Oregon State University 6924
CHEM STUDIES LUNAR + METOR. SAMPLES
Period Obligations
02/01/1993-02/01/1994 FY94: \$0 TOTAL: \$795,164
Prin. Invest. NASA Tech. Officer CASE Category
R A SCHMITT JSC/I D BROWNE 32-Geological Sci
S S HUGHES

NAGW 1883 Oregon State University 6925
SATELLITE ESTIMATES OF FRESHWATER AND LATENT HEAT
FLUXES
Period Obligations
01/02/1990-12/31/1992 FY94: \$0 TOTAL: \$845,766
Prin. Invest. NASA Tech. Officer CASE Category
D B CHELTON HQ/G S LAGERLOEF 33-Oceanography
HQ/W S WILSON

NAGW 2445 Oregon State University 6926
RESEARCH OF THE ATMOSPHERE OF MARS
Period Obligations
04/02/1991-10/31/1994 FY94: \$74,930 TOTAL: \$311,852
Prin. Invest. NASA Tech. Officer CASE Category
J R BARNES HQ/W QUAIDE 11-Astronomy

NAGW 2454 Oregon State University 6927
COUPLED ATMOSPHERE/OCEAN PROCESSES AND PRIMARY PRO
DUCTION IN THE SOUTHERN OCEAN
Period Obligations
04/19/1991-12/31/1994 FY94: \$1,054,000 TOTAL: \$4,652,051
Prin. Invest. NASA Tech. Officer CASE Category
M R ABBOTT HQ/B G MITCHELL 33-Oceanography
HQ/W S WILSON

NAGW 2475 Oregon State University 6928
SATELLITE ESTIMATED BIOLOGICAL PHYSICAL COUPLING I N
EASTERN BOUNDARY CURRENTS
Period Obligations
09/01/1991-08/31/1994 FY94: \$0 TOTAL: \$282,191
Prin. Invest. NASA Tech. Officer CASE Category
P T STRUB HQ/D ADAMEC 39-Env Sci, NEC
HQ/R A SCHIFFER

NAGW 2707 Oregon State University 6929
COLLABORATIVE RESEARCH: SCALING THEORIES OF HYDROL OGY,
HYDRAULICS, AND GEOMETRY OF RIVER NETWORKS
Period Obligations
09/19/1991-12/31/1994 FY94: \$50,377 TOTAL: \$155,377
Prin. Invest. NASA Tech. Officer CASE Category
E C WEYINIRE HQ/M Y WEI 39-Env Sci, NEC
V J GUPTA HQ/J S THEON

NAGW 2715 Oregon State University 6930
NAGW-2715/OREGON STATE UNIV/TOPEX/POSEIDON TIDES
Period Obligations
09/24/1991-05/31/1994 FY94: \$0 TOTAL: \$401,020
Prin. Invest. NASA Tech. Officer CASE Category
A F BENNETT HQ/D ADAMEC 33-Oceanography
HQ/R A SCHIFFER

NASA'S UNIVERSITY PROGRAM **OREGON (Continued)**

NAGW 2833 Oregon State University 6931
CHEMISTRY OF HYDROTHERMAL PROCESSES AND ORIGIN OF LIFE
Period *Obligations*
02/13/1992-01/31/1994 FY94: \$0 TOTAL: \$209,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B R SIMONEIT HQ/J D RUMMEL 12-Chemistry

NAGW 3683 Oregon State University 6939
ASSESSING REMOTE SENSING DATA, EDUCATE PUBLIC ABOUT PACIFIC OCEAN AND OTHER OCEANOGRAPHIC/EARTH SCI
Period *Obligations*
08/12/1993-12/31/1994 FY94: \$0 TOTAL: \$492,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L WEBER HQ/R SMITH 33-Oceanography
HQ/M V PHELPS

NAGW 3062 Oregon State University 6932
DEVELOPMENT AND ANALYSIS OF A MODEL FUNCTION FOR THE ERS-1 C-BAND SCATTEROMETER USING OPERATIONAL
Period *Obligations*
05/04/1992-01/31/1995 FY94: \$94,994 TOTAL: \$354,385
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M H FREILICH HQ/D ADAMEC 32-Geological Sci
HQ/R A SCHIFFER

NAGW 3716 Oregon State University 6940
ANALYSIS OF LAZY-2 GRAVITROPIC RESPONSE MUTANT OF TOMATO
Period *Obligations*
08/19/1993-06/30/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T LOMAX HQ/T W HALSTEAD 51-Biological Sci

NAGW 3217 Oregon State University 6933
NAGW-3217/OREGON STATE UNIV/MUD VOLCANOES ON EARTH AND MARS
Period *Obligations*
09/29/1992-03/31/1994 FY94: \$0 TOTAL: \$29,994
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P D KOMAR HQ/J M BOYCE 32-Geological Sci

NAGW 3737 Oregon State University 6941
CYCLING OF DMSP AND DMS IN SURFACE OCEAN WATERS
Period *Obligations*
09/10/1993-05/31/1996 FY94: \$147,987 TOTAL: \$215,253
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E B SHERR HQ/A C JANETOS 33-Oceanography
B F SHERR HQ/J T SUTTLES
G WOLFE

NAGW 3305 Oregon State University 6934
NAGW-3305/OREGON STATE UNIV/INVESTIGATIONS OF SCATTERING MECHANISMS AND CENTIMETRIC SURFACE ROUGHNESS
Period *Obligations*
12/31/1992-12/31/1993 FY94: \$0 TOTAL: \$77,754
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M H FREILICH HQ/J S THEON 33-Oceanography

NAGW 3745 Oregon State University 6942
ANALYSIS OF LAND-USE EFFECTS ON LANDSCAPE PATTERNS AND BIOLOGICAL DIVERSITY IN PACIFIC NW FORESTS
Period *Obligations*
09/17/1993-05/31/1996 FY94: \$118,079 TOTAL: \$202,896
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D O WALLIN HQ/D E WICKLAND 39-Env Sci, NEC
W B COHEN HQ/A C JANETOS
G A BRADSHAW

NAGW 3510 Oregon State University 6935
WIND-DRIVEN VARIABILITY ON THE SOUTHERN HEMISPHERE OCEANS
Period *Obligations*
04/09/1993-12/31/1995 FY94: \$140,270 TOTAL: \$265,532
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D B CHILTON HQ/D ADAMEC 33-Oceanography

NAGW 3870 Oregon State University 6943
NAGW-3870/B OREGON STATE UNIV. 'REL. BETWEEN CHRL OPHYL, SPECTRAL VEGETATION INDICES...' 36-MO
Period *Obligations*
03/18/1994-02/28/1995 FY94: \$105,999 TOTAL: \$105,999
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B J YODER HQ/D E WICKLAND 39-Env Sci, NEC
W E WINDER HQ/A C JANETOS

NAGW 3545 Oregon State University 6936
CHEMICAL STUDIES OF LUNAR, METEORITE AND TERRESTRIAL SAMPLES
Period *Obligations*
04/22/1993-01/31/1994 FY94: \$0 TOTAL: \$88,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A SCHMITT HQ/H C BRINTON 32-Geological Sci

NAGW 4104 Oregon State University 6944
THE IMPACT OF EL NINO ON TIDAL MIXING AND AIR-SEA INTERACTION
Period *Obligations*
08/05/1994-04/30/1995 FY94: \$41,175 TOTAL: \$41,175
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C PADEO HQ/J S THEON 33-Oceanography

NAGW 3580 Oregon State University 6937
STUDY OF INHERENT OPTICAL PROPERTIES IN RELATION TO REMOTELY SENSED RADIANCE
Period *Obligations*
05/25/1993-03/01/1995 FY94: \$128,114 TOTAL: \$161,158
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ZANEVELD HQ/D E WICKLAND 33-Oceanography
HQ/A C JANETOS

NAS 1-18992 Oregon State University 6945
ERBE SCIENCE TEAM SUPPORT
Period *Obligations*
09/20/1989-01/19/1994 FY94: \$0 TOTAL: \$301,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A COAKLEY LARC/J E COOPER 31-Atmos Sci
LARC/B BARKSTROM

NAGW 3642 Oregon State University 6938
CENTER FOR AIRBORNE ENVIRONMENTAL ANALYSES
Period *Obligations*
08/19/1993-03/31/1995 FY94: \$154,890 TOTAL: \$323,576
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H WARING HQ/D E WICKLAND 39-Env Sci, NEC
R W MCCREIGHT HQ/A C JANETOS
C E CHEN

NAS 1-19952 Oregon State University 6946
SCIENCE SUPPORT TO THE LITE SCIENCE TEAM
Period *Obligations*
05/14/1993-05/12/1996 FY94: \$30,000 TOTAL: \$55,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A COAKLEY LARC/G L MADDOREA 31-Atmos Sci

NASA'S UNIVERSITY PROGRAM
OREGON (Continued)

NAS 5-31360 Oregon State University 6947
MODIS INVESTIGATION
Period *Obligations*
12/30/1991-12/14/2001 FY94: \$363,000 TOTAL: \$803,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M R ABBOTT GSFC/H OSEROFF 33-Oceanography

NGT 00-040-033 Oregon State University 6955
NATL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
04/03/1991-02/28/1995 FY94: \$170,000 TOTAL: \$668,001
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D R CALDWELL HQ/E T SCHWARTZ 99-Multi-Discip

NCC 2-661 Oregon State University 6948
NUMERICAL SIMULATIONS OF THE MARTIAN ATMOSPHERE
Period *Obligations*
03/15/1990-10/31/1994 FY94: \$0 TOTAL: \$63,060
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J R BARNES ARC/R M HABERLE 31-Atmos Sci
ARC/J B POLLACK

NGT 00-050-321 Oregon State University 6956
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/28/1988-07/31/1993 FY94: \$0 TOTAL: \$58,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
T LOMAX HQ/F C OWENS 51-Biological Sci

NGT 00-030-029 Oregon State University 6949
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
04/11/1991-08/31/1993 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M L DICKSON HQ/G ASRAR 33-Oceanography

NGT 00-050-624 Oregon State University 6957
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/08/1990-06/30/1993 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J G RICHMAN HQ/F C OWENS 33-Oceanography

NGT 00-030-037 Oregon State University 6950
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
02/07/1991-10/31/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
F D ZARON HQ/G ASRAR 33-Oceanography

NGT 00-050-829 Oregon State University 6958
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/23/1991-08/31/1993 FY94: \$0 TOTAL: \$31,096
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A C KLEIN HQ/F C OWENS 49-Engr, NEC

NGT 00-030-066 Oregon State University 6951
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/19/1991-12/31/1992 FY94: \$0 TOTAL: \$21,863
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A H BARNARD HQ/D M BUTLER 33-Oceanography
M ABBOTT HQ/G S WILSON

NGT 00-050-914 Oregon State University 6959
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/21/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R WARING HQ/J ALEXANDER 55-Agriculture Sci

NGT 00-030-188 Oregon State University 6952
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/01/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
B SHERR HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NGT 00-070-193 Oregon State University 6960
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/04/1990-06/30/1994 FY94: \$0 TOTAL: \$66,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M ABBOTT HQ/F C OWENS 32-Geological Sci

NGT 00-030-203 Oregon State University 6953
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/01/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
P SOLLINS HQ/G ASRAR 39-Env Sci, NEC
HQ/D M BUTLER

NGT 00-070-400 Oregon State University 6961
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
09/29/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
D BELLA HQ/D K RUSSELL 75-Political Sci

NGT 00-030-263 Oregon State University 6954
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/22/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
M FREILICH HQ/R A SCHIFFER 33-Oceanography
HQ/G ASRAR

NCA 2-691 Reed College 6962
CYTOPLASMIC REARRANGEMENTS AND ESTABLISHMENT OF THE
EMBRYONIC BODY PLAN AT MICROGRAVITY
Period *Obligations*
03/03/1992-07/31/1994 FY94: \$0 TOTAL: \$79,678
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
S D BLACK ARC/K A SOUZA 51-Biological Sci

NASA'S UNIVERSITY PROGRAM
OREGON (Continued)

NAG 8-222 **Southern Oregon State College** **6963**
JOVE
Period *Obligations*
02/25/1992-11/16/1995 FY94: \$20,500 TOTAL: \$118,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D'ALLURA MSFC/F SIX 11-Astronomy
G STRINGER

NAG 1-963 **University of Oregon - Eugene** **6964**
ATMOSPHERIC AND SPECTROSCOPIC RESEARCH IN THE FAR INFRARED
Period *Obligations*
02/27/1989-02/21/1995 FY94: \$75,000 TOTAL: \$670,340
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K J PARK LARC/I G NOLT 31-Atmos Sci

NAG 1-1427 **University of Oregon - Eugene** **6965**
EXCITATION OF ELECTRONIC STATES OF ATOMS AND MOLECULES BY COLLISION WITH HEAVY GAS PARTICLES
Period *Obligations*
05/08/1992-09/30/1993 FY94: \$1 TOTAL: \$45,538
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C F HANSEN LARC/P A GNOFFO 41-Aero Engr

NAG 5-1903 **University of Oregon - Eugene** **6966**
KINEMATIC AND DYNAMIC MODELING OF WESTERN NORTH AMERICAN TECTONIC ACTIVITY
Period *Obligations*
02/20/1992-02/28/1995 FY94: \$91,000 TOTAL: \$239,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E D HUMPHREYS GSFC/B G BILLS 32-Geological Sci

NAG 5-2086 **University of Oregon - Eugene** **6967**
SOFT X-RAY HALOS AROUND LOW MASS DISK GALAXIES
Period *Obligations*
08/25/1992-09/14/1993 FY94: \$0 TOTAL: \$19,883
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G D BOTHUN GSFC/R PETRE 11-Astronomy

NAG 5-2418 **University of Oregon - Eugene** **6968**
TIMING STUDIES OF NEUTRON STAR AND WHITE DWARF X-RAY BINARIES
Period *Obligations*
11/06/1993-11/14/1994 FY94: \$34,200 TOTAL: \$34,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J IMAMURA GSFC/D WEST 11-Astronomy

NAG 5-2662 **University of Oregon - Eugene** **6969**
LOW SURFACE BRIGHTNESS GALAXIES IN THE VIT DATA BASE
Period *Obligations*
07/29/1994-07/31/1995 FY94: \$28,000 TOTAL: \$28,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G D BOTHUN GSFC/D WEST 11-Astronomy

NAG 8-1047 **University of Oregon - Eugene** **6970**
THE NEAR-UV PROPERTIES OF GALAXIES WHICH HAVE LOW OPTICAL SURFACE BRIGHTNESS
Period *Obligations*
03/16/1994-02/28/1995 FY94: \$38,953 TOTAL: \$38,953
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G D BOTHUN MSFC/J OWENS 31-Atmos Sci
E P SMITH

NAGW 3354 **University of Oregon - Eugene** **6971**
NAGW-3354UNIV OREGON EUGENE/NUCLEATION OF QUANTIZED VORTICES FROM ROTATING SUPERFLUID DROPS
Period *Obligations*
01/27/1993-12/31/1993 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J DONNELLY HQ/M C LEE 13-Physics

NGT 00-051-307 **University of Oregon - Eugene** **6972**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/02/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A MALONY ARC/K G STEVENS 22-Computer Science

PENNSYLVANIA

NGT 00-090-183 **Bryn Mawr College** **6973**
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1995 FY94: \$7,000 TOTAL: \$19,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V DONNAY HQ/D RUSSELL 99-Multi-Discip

NAG 5-2509 **Bucknell University** **6974**
DESIGN OF ROUTERS FOR MASSIVELY PARALLEL COMPUTERS WITH GREATER THAN A MILLION PROCESSORS
Period *Obligations*
02/08/1994-02/28/1995 FY94: \$39,991 TOTAL: \$39,991
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M F ABURDENE GSFC/J E DORBAND 22-Computer Science

NAGW 3377 **Bucknell University** **6975**
EFFECTS OF NON-SPHERICITY AND HETEROGENEITY ON LIGHT SCATTERING FROM COMETARY DUST.
Period *Obligations*
01/01/1993-12/31/1994 FY94: \$22,761 TOTAL: \$44,117
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J LIEN HQ/J M BOYCE 32-Geological Sci

NAG 1-1075 **Carnegie - Mellon University** **6976**
RESEARCH ON CONTROL OF REDUNDANT MANIPULATORS
Period *Obligations*
01/11/1990-12/31/1994 FY94: \$0 TOTAL: \$268,544
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P K KHOSLA LARC/P W GOODE 29-Math/Computer, NEC
LARC/S L VAZQUEZ

NAG 2-709 **Carnegie - Mellon University** **6977**
NUMERICAL STUDY OF INTERNAL FLOWS AND BOUNDARY LAYER CONTROL IN INLETS OF TURBOJET ENGINES
Period *Obligations*
06/04/1991-12/31/1993 FY94: \$0 TOTAL: \$256,409
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T SHIH ARC/W J CHYU 41-Aero Engr
ARC/D P BENCZE

NAG 2-850 **Carnegie - Mellon University** **6978**
HYDROGEN-RESISTANT TITANIUM ALUMINIDE ALLOYS
Period *Obligations*
06/24/1993-11/30/1994 FY94: \$0 TOTAL: \$105,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A W THOMPSON ARC/H G NELSON 47-Materials Engr

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NAG 3-929 Carnegie - Mellon University 6979
NUM STUDY OF THE FLOW FIELDS INSIDE COMP AND TURB COMP
OF GAS TURB ENG
Period *Obligations*
09/18/1988-11/16/1994 FY94: \$70,000 TOTAL: \$400,708
Pnn Invest *NASA Tech Officer* *CASE Category*
T I SHIH LERC/R J ROELKE 41-Aero Engr
LERC/R D MOORE

NAG 3-1009 Carnegie - Mellon University 6980
NUMERICAL STUDIES OF COMBUSTION PROCESS IN HSCT AN D
SMALL GAS TURBINE ENGINES
Period *Obligations*
02/14/1989-12/31/1994 FY94: \$0 TOTAL: \$460,000
Pnn Invest *NASA Tech Officer* *CASE Category*
J I RAMOS LERC/H L NGUYEN 46-Mech Engr
T I SHIH

NAG 3-1390 Carnegie - Mellon University 6981
MICROSCALE HYDRODYNAMICS NEAR MOVING CONTACT LINES
Period *Obligations*
12/01/1992-12/21/1994 FY94: \$184,000 TOTAL: \$341,232
Pnn Invest *NASA Tech Officer* *CASE Category*
S GAROFF LERC/R L THOMPSON 19-Phys Sci, NEC

NAG 3-1487 Carnegie - Mellon University 6982
EXTENSION OF THE INTEGRATED FORCE METHOD FOR MEMBR
ANE AND BENDING COUPLED PROBLEMS
Period *Obligations*
04/19/1993-04/12/1994 FY94: \$0 TOTAL: \$32,082
Pnn Invest *NASA Tech Officer* *CASE Category*
S SAIGAL LERC/D A HOPKINS 49-Engr, NEC

NAG 3-1505 Carnegie - Mellon University 6983
TRANSPORT PHENOMENA IN STRATIFIED MULTI-FLUID FLOW IN
THE PRESENCE AND IN THE ABSENCE OF GRAVITY
Period *Obligations*
06/23/1993-07/12/1995 FY94: \$130,000 TOTAL: \$260,000
Pnn Invest *NASA Tech Officer* *CASE Category*
N CHIGIER LERC/R L THOMPSON 19-Phys Sci, NEC

NAG 5-1468 Carnegie - Mellon University 6984
RESEARCH RELATIVE TO AVOIDING SPACE ROBOT COLLISIONS
UTILIZING TRI-MODE SKIN SENSORS
Period *Obligations*
09/20/1990-02/14/1995 FY94: \$72,053 TOTAL: \$167,057
Pnn Invest *NASA Tech Officer* *CASE Category*
F PRINZ GSFC/J M VRANISH 22-Computer Science
S MAHALINGAM

NAG 8-964 Carnegie - Mellon University 6985
ELECTROKINETIC TRANSPORT OF HETEROGENEOUS PARTICLE IN
Period *Obligations*
05/26/1993-12/31/1994 FY94: \$93,000 TOTAL: \$185,145
Pnn Invest *NASA Tech Officer* *CASE Category*
J L ANDERSON MSFC/T MILLER 19-Phys Sci, NEC
S GAROFF

NAGW 1175 Carnegie - Mellon University 6986
AUTONOMOUS PLANETARY ROVER
Period *Obligations*
10/19/1987-11/30/1994 FY94: \$574,400 TOTAL: \$10,275,379
Pnn Invest *NASA Tech Officer* *CASE Category*
T KANADE HQ/D LAVERY 49-Engr, NEC
T MITCHELL HQ/C B SOLLOWAY
W L WHITTAKER

NAGW 2998 Carnegie - Mellon University 6987
EREBUS EXPLORER
Period *Obligations*
03/24/1992-12/31/1994 FY94: \$1,117,869 TOTAL: \$3,952,664
Pnn Invest *NASA Tech Officer* *CASE Category*
R WHITTAKER HQ/D LAVERY 49-Engr, NEC

NAGW 3863 Carnegie - Mellon University 6988
LUNAR ROVER DEMONSTRATION
Period *Obligations*
01/26/1994-12/31/1994 FY94: \$675,600 TOTAL: \$675,600
Pnn Invest *NASA Tech Officer* *CASE Category*
W L WHITTAKER HQ/D B LAVERN 49-Engr, NEC

NAGW 3903 Carnegie - Mellon University 6989
ROBOTICS ENGINEERING CONSORTIUM: COMMERCIALIZATION OF
NASA ROBOTIC TECHNOLOGY
Period *Obligations*
04/11/1994-01/31/1995 FY94: \$999,815 TOTAL: \$999,815
Pnn Invest *NASA Tech Officer* *CASE Category*
W L WHITTAKER HQ/D B LAVERY 44-Civil Engr

NAG10-95 Carnegie - Mellon University 6990
CONFIGURATION OF PRECISION MECHANISM FOR SPACE SHUTTLE
TILE PROCESSING
Period *Obligations*
12/16/1991-12/15/1994 FY94: \$338,156 TOTAL: \$1,447,587
Pnn Invest *NASA Tech Officer* *CASE Category*
W L WHITTAKER KSC/T GRAHAM 99-Multi-Discip

NAS 8-38348 Carnegie - Mellon University 6991
MODELING THE EFFECTS OF \$HROUD CONTACT AND FRICTION
DAMPERS ON THE MISTUNED RESPONSE OF TURBO-PUMPS
Period *Obligations*
05/15/1991-08/31/1994 FY94: \$5,000 TOTAL: \$255,000
Pnn Invest *NASA Tech Officer* *CASE Category*
J H GRIFFIN MSFC/L A KIEFLING 46-Mech Engr
MSFC/K K MIMS

NCA 2-602 Carnegie - Mellon University 6992
THE ROLE OF MICROSTRUCTURE IN HYDROGEN-INDUCED DUC
TILITY LOSSES IN TITANIUM ALUMINIDE ALLOYS
Period *Obligations*
05/01/1991-05/14/1993 FY94: \$0 TOTAL: \$80,000
Pnn Invest *NASA Tech Officer* *CASE Category*
A W THOMPSON ARC/H G NELSON 47-Materials Engr

NCA 2-824 Carnegie - Mellon University 6993
REDUCING NON-UNIFORMITIES IN TURBOJET INLETS BY VO RTEK
GENERATORS
Period *Obligations*
06/03/1993-08/31/1993 FY94: \$0 TOTAL: \$17,982
Pnn Invest *NASA Tech Officer* *CASE Category*
T SHIH ARC/W J CHYU 46-Mech Engr

NCC 2-707 Carnegie - Mellon University 6994
CONSTRAINT-DIRECTED INTEGRATION OF SCHEDULING AND P
LANNING WITH APPLICATIONS TO SPACE TELESCOPE.....
Period *Obligations*
03/08/1991-09/30/1994 FY94: \$100,000 TOTAL: \$370,000
Pnn Invest *NASA Tech Officer* *CASE Category*
S F SMITH ARC/P E FRIEDLAND 22-Computer Science
ARC/P H LAIRD

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NCC 2-845 Carnegie - Mellon University 6995
NUMERICAL STUDY OF BOUNDARY-LAYER CONTROL IN AERODYNAMICS
Period Obligations
03/14/1994-12/31/1994 FY94: \$68,887 TOTAL: \$68,887
Prin. Invest. NASA Tech. Officer CASE Category
T I SHIH ARC/W J CHYU 41-Aero Engr
ARC/D P BENCZE

NCC 2-5057 Carnegie - Mellon University 6996
DEVELOPING A GRID GENERATION METHODOLOGY FOR THE NUMERICAL STUDY OF INLET BLEED
Period Obligations
05/19/1994-10/14/1994 FY94: \$6,432 TOTAL: \$6,432
Prin. Invest. NASA Tech. Officer CASE Category
T I SHIH ARC/W J CHYU 41-Aero Engr

NCC 3-262 Carnegie - Mellon University 6997
DEVELOPMENT OF MICROSCOPIC INTERFACE IMAGING AND FLOW FIELD MEASUREMENTS FOR FLUIDS NEAR SOLID SURFACE
Period Obligations
04/24/1992-01/31/1995 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
S GAROFF LERC/M M WEISLOGEL 13-Physics
LERC/R W VERNON

NCC 3-297 Carnegie - Mellon University 6998
A LUNAR LANDER ENGINEERING MODEL
Period Obligations
03/29/1993-09/14/1993 FY94: \$0 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
W L WHITTAKER LERC/L S MASON 46-Mech Engr
LERC/D J HOFFMAN

NGT 00-050-559 Carnegie - Mellon University 6999
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1990-07/31/1994 FY94: \$0 TOTAL: \$77,000
Prin. Invest. NASA Tech. Officer CASE Category
T KANADE HQ/V C OWENS 45-Elec Engr

NGT 00-050-823 Carnegie - Mellon University 7000
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-07/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A W THOMPSON HQ/F C OWENS 47-Materials Engr

NGT 00-050-965 Carnegie - Mellon University 7001
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/15/1992-09/14/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
H T KUNG HQ/P HUNTER 22-Computer Science

NGT 00-050-990 Carnegie - Mellon University 7002
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/24/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
T KANADE LARC/E J PRIOR 45-Elec Engr

NGT 00-050-995 Carnegie - Mellon University 7003
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/17/1992-09/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
B MOREL HQ/J K ALEXANDER 49-Engr, NEC

NGT 00-051-026 Carnegie - Mellon University 7004
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/14/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
S A SHAFER ARC/M MOORE 22-Computer Science

NGT 00-051-039 Carnegie - Mellon University 7005
NGT-51039/CARNEGIE MELLON UNIV/GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/05/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
R SIMMONS JPL/C HIX 45-Elec Engr
T MITCHELL

NGT 00-051-045 Carnegie - Mellon University 7006
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/14/1993-08/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
E KROTKOV MSFC/F SIX 45-Elec Engr

NGT 00-051-162 Carnegie - Mellon University 7007
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/05/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
J M PEHA HQ/P HUNTER 22-Computer Science

NGT 00-051-231 Carnegie - Mellon University 7008
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
05/16/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
B V KUMAR JSC/S GOLDSTEIN 45-Elec Engr

NGT 00-051-272 Carnegie - Mellon University 7009
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
M ERDMANN JPL/C HIX 22-Computer Science

NGT 00-051-275 Carnegie - Mellon University 7010
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/26/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
W WHITTAKER JPL/C HIX 22-Computer Science

NGT 00-051-292 Carnegie - Mellon University 7011
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/06/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
C THORPE HQ/D HOLLAND 22-Computer Science

NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)

NAGT 00-090-184 Carnegie - Mellon University 7012
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R KAIL HQ/D RUSSELL 99-Multi-Discip

NAG 1-1102 Drexel University 7013
 ROBUST CONTROL OF SYSTEMS WITH REAL PARAMETER UNCERTAINTY AND UNMODELLED DYNAMICS
Period *Obligations*
 02/09/1990-07/31/1993 FY94: \$0 TOTAL: \$190,283
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R FISCHL LARC/M R WASZAK 41-Aero Engr
 B C CHANG LARC/C M BELCASTRO

NAG 1-1124 Drexel University 7014
 DESIGN OF COMBINATIONAL AND SEQUENTIAL MACHINES THAT ARE UPSET TOLERANT
Period *Obligations*
 05/18/1990-12/31/1993 FY94: \$0 TOTAL: \$166,709
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L A TRACHTENBERG LARC/F L PITTS 45-Elec Engr
 R FISCHL LARC/C W WEISSNER

NAG 1-1224 Drexel University 7015
 SULPHUR GAS MEASUREMENTS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY W/ISOTOPICALLY LABELLED INTERNAL
Period *Obligations*
 02/15/1991-06/30/1995 FY94: \$153,000 TOTAL: \$715,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A R BANDY LARC/R J BENDURA 31-Atmos Sci
 D C THORNTON LARC/J M HOELL

NAG 2-876 Drexel University 7016
 DEVELOPMENT OF AN ATMOSPHERIC PRESSURE IONIZATION MASS SPECTROMETER (APIMS)
Period *Obligations*
 12/17/1993-10/31/1995 FY94: \$310,500 TOTAL: \$310,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A R BRANDY ARC/E P CONDON 31-Atmos Sci
 ARC/A P MARGOZZI

NAG 3-1059 Drexel University 7017
 DEVELOPMENT OF IMPROVED HYPERSONIC ENGINE SEALS
Period *Obligations*
 06/30/1989-10/06/1994 FY94: \$45,000 TOTAL: \$647,100
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F K KO LERC/B M STEINETZ 46-Mech Engr
 R MUTHARASON
 P PASTORE

NAG 3-1117 Drexel University 7018
 PROPANE COMBUSTION NEAR THE LEAN FLAMMABILITY LIMIT AND THE SOOTING LIMIT
Period *Obligations*
 12/29/1989-11/30/1993 FY94: \$0 TOTAL: \$209,845
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D L MILLER LERC/M J RABINOWITZ 41-Aero Engr

NAG 3-1347 Drexel University 7019
 THERMAL DURABILITY OF SAPPHIRE OPTICAL WAVEGUIDES PROCESSED INTO HIGH TEMPERATURE CERAMIC COMPOSITES
Period *Obligations*
 04/23/1992-06/30/1995 FY94: \$0 TOTAL: \$70,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M A EL-SHERIF LERC/D J ROTH 47-Materials Engr

NAG 3-1421 Drexel University 7020
 FUEL-AIR MIXING IN LEAN BURN DIRECT INJECTION COMBUSTION
Period *Obligations*
 12/17/1992-01/04/1995 FY94: \$53,907 TOTAL: \$103,807
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K J CHOI LERC/R R TACINA 41-Aero Engr

NAG 8-298 Drexel University 7021
 IMPACT OF TEMPORAL AND SPATIAL RESOLUTION ON HEAT AND MOISTURE BUDGET DIAGNOSTICS
Period *Obligations*
 07/08/1993-07/07/1994 FY94: \$0 TOTAL: \$16,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D PERKEY MSFC/F ROBERTSON 54-Env Biology

NAG 8-924 Drexel University 7022
 LAMPS DYNAMIC MODEL
Period *Obligations*
 07/07/1992-06/30/1993 FY94: \$0 TOTAL: \$15,997
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D J DERKEY MSFC/F R ROBERTSON 31-Atmos Sci

NAGW 2559 Drexel University 7023
 NAGW-2559/DREXEL UNIV/STAR CLUSTER EVOLUTION WITH PRIMORDIAL BINARIES
Period *Obligations*
 06/13/1991-02/28/1995 FY94: \$43,000 TOTAL: \$163,480
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S L MCMILLAN HQ/D P HUENEMOERDER 11-Astronomy
 HQ/E J WEILER

NAGW 3738 Drexel University 7024
 DEVELOPMENT OF INSTRUCTIONAL MATERIALS BASED ON THE GREENHOUSE
Period *Obligations*
 09/08/1993-12/31/1994 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D R BROOKE HQ/R A SCHIFFER 59-Life Sci, NEC
 HQ/D M BUTLER

NAS 1-18154 Drexel University 7025
 (SBRE) EARTH RADIATION BUDGET EXPERIMENT SCIENTIFIC INVESTIGATIONS
Period *Obligations*
 09/18/1985-02/28/1994 FY94: \$0 TOTAL: \$455,624
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F B HOUSE LARC/J E COOPER 31-Atmos Sci

NCC 1-171 Drexel University 7026
 NEURAL CONTROL OF MAGNETIC SUSPENSION SYSTEMS FOR AEROSPACE APPLICATIONS
Period *Obligations*
 03/12/1993-03/08/1995 FY94: \$36,528 TOTAL: \$86,528
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S GRAY LARC/D I SOLOWAY 45-Elec Engr
 LARC/P J HALEY

NCC 3-149 Drexel University 7027
 FIBER OPTIC LINKS FOR MILLIMETER WAVE PHASED ARRAY ANTENNAS IN COMMUNICATION SATELLITES II
Period *Obligations*
 09/22/1989-09/30/1994 FY94: \$22,983 TOTAL: \$264,750
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A S DARYOUSH LERC/R R KUNATH 45-Elec Engr

NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)

NCC 2-745 Franklin-Marshall College 7028			
INFRARED STUDIES OF COOL MATERIAL AROUND YOUNG MA IN SEQUENCE STARS			
<i>Period</i>	<i>Obligations</i>		
01/13/1992-09/30/1993	FY94: \$0	TOTAL: \$17,408	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D E BACKMAN	ARC/F C WITTEBORN	11-Astronomy	
	ARC/B J BALDWIN		
NAGW 3521 Lafayette College 7029			
NAGW-3521/LAFAYETTE COLLEGE/DENSITIES AND PHASE EQUILIBRIA TO 1.4 GPA AND 120K			
<i>Period</i>	<i>Obligations</i>		
04/16/1993-02/28/1995	FY94: \$37,433	TOTAL: \$74,238	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D HOGENBLOOM	HQ/J BOYCE	32-Geological Sci	
NAG 1-1477 Lehigh University 7030			
A LINKAGE SUSPENSION SYSTEM FOR FLEXIBLE SPACE ROBOTS NLPN 92-1223			
<i>Period</i>	<i>Obligations</i>		
02/01/1993-11/30/1994	FY94: \$0	TOTAL: \$62,498	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M CHEW	LARC/J JUANG	42-Astro Engr	
	LARC/L G HORTA		
NAG 3-1578 Lehigh University 7031			
HYPERSONIC THREE - DIMENSIONAL BOUNDARY LAYER SEPARATION			
<i>Period</i>	<i>Obligations</i>		
03/08/1994-03/07/1995	FY94: \$60,389	TOTAL: \$60,389	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J D WALKER	LERC/L A POVINELLI	41-Aero Engr	
NAG 3-1632 Lehigh University 7032			
LOW DIMENSIONAL MODELS FOR THERMOCAPILLARY CONVECTIVE FLOWS IN CRYSTALS PROCESSES			
<i>Period</i>	<i>Obligations</i>		
06/24/1994-06/23/1995	FY94: \$49,816	TOTAL: \$49,816	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A LIAKOPOULOS	LERC/R J SKARDA	46-Mech Engr	
P A BLYTHE			
NAG 5-2100 Lehigh University 7033			
MASS FLOW IN THE INTERACTING SEMI-DETACHED BINARY DELTA LIBRAE			
<i>Period</i>	<i>Obligations</i>		
09/15/1992-01/31/1995	FY94: \$16,440	TOTAL: \$32,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G E MCCLUSKEY	GSFC/D WEST	11-Astronomy	
NAG 8-972 Lehigh University 7034			
MONODISPERSE POLYMER PARTICLES CONTAINING LASER-EXCITABLE DYES			
<i>Period</i>	<i>Obligations</i>		
05/24/1993-06/14/1994	FY94: \$0	TOTAL: \$119,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J W VANDERHOFF	MSFC/D M KORNFELD	12-Chemistry	
NAG 9-45 Lehigh University 7035			
HISTORY IRON CHONDRITIC METEORITES			
<i>Period</i>	<i>Obligations</i>		
04/01/1983-10/01/1994	FY94: \$0	TOTAL: \$1,133,635	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J I GOLDSTEIN	JSC/I D BROWNE	47-Materials Engr	
D B WILLIAMS	JSC		
R SELLAMUTHU			
NAGW 3374 Lehigh University 7036			
SHOCK AND THERMAL HISTORY OF IRON AND CHONDRITIC METEORITES			
<i>Period</i>	<i>Obligations</i>		
02/10/1993-02/28/1995	FY94: \$146,880	TOTAL: \$285,930	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J I GOLDSTEIN	HQ/H C BRINTON	32-Geological Sci	
NCA 2-673 Lehigh University 7037			
INFRARED LABORATORY SPECTRAL STUDIES FOR THE EARTH'S UPPER ATMOSPHERE AND VENUS LOWER ATMOSPHERE.			
<i>Period</i>	<i>Obligations</i>		
11/05/1991-06/30/1993	FY94: \$0	TOTAL: \$66,666	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R LOVEJOY	ARC/C C CHACKERIAN	11-Astronomy	
NGT 00-070-346 Lehigh University 7038			
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/12/1993-06/30/1995	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J RICLES	HQ/D K RUSSELL	46-Mech Engr	
NAS 5-28566 Lincoln University - Pa. 7039			
RESEARCH STUDY OF MEDICAL INFORMATION MANAGEMENT SYSTEM MEDICAL DIAGNOSTICS WITH MATH MODELING			
<i>Period</i>	<i>Obligations</i>		
09/25/1984-11/30/1993	FY94: \$0	TOTAL: \$886,335	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
FRANKOWSKI	GSFC/G E ALCORN	56-Medical Sciences	
NGT 00-090-020 Lincoln University - Pa. 7040			
LINCOLN ADVANCED SCIENCE AND ENGINEERING REINFORCEMENT PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/23/1988-06/30/1995	FY94: \$180,000	TOTAL: \$580,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W WILLIAMS	HQ/Y B FREEMAN	49-Engr, NEC	
NAG 9-118 Pennsylvania State Univ - Hershey Med. 7041			
VEGETATION-INDUCED GASTRIC DYSRHYTHMIAS IN			
<i>Period</i>	<i>Obligations</i>		
05/01/1985-04/01/1994	FY94: \$0	TOTAL: \$608,353	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
K KOCH	JSC/F A KUTYNA	56-Medical Sciences	
R M STERN			
NGT 00-070-327 Pennsylvania State Univ - Hershey Med. 7042			
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/01/1993-06/30/1995	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W SEVERS	HQ/D K RUSSELL	56-Medical Sciences	
NAG 1-999 Pennsylvania State Univ. - Univ. Park 7043			
STUDIES OF RADIATION AND MICROPHYSICS IN CIRRHUS AND MARINE STRATOCUMULUS			
<i>Period</i>	<i>Obligations</i>		
05/25/1989-11/30/1994	FY94: \$35,000	TOTAL: \$328,001	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T P ACKERMAN	LARC/T OWENS	31-Atmos Sci	

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NAG 1-1047 Pennsylvania State Univ. - Univ. Park 7044
THE AEROACOUSTICS OF SUPERSONIC JET
Period Obligations
08/16/1989-06/30/1995 FY94: \$26,985 TOTAL: \$525,533
Prin. Invest. NASA Tech. Officer CASE Category
P J MORRIS LARC/J M SEINER 41-Aero Engr
D K MCLAUGHLIN LARC/J S PREISSER

NAG 1-1057 Pennsylvania State Univ. - Univ. Park 7045
IN SITU DETECTION OF TROPOSPHERIC OH, HO₂, NO₂, AND NO BY
LASER INDUCED FLUORESCENCE IN DETECTION
Period Obligations
08/31/1989-03/31/1995 FY94: \$129,893 TOTAL: \$622,631
Prin. Invest. NASA Tech. Officer CASE Category
W H BRUNE LARC/J M HOELL 31-Atmos Sci
LARC/R J BENDURA

NAG 1-1095 Pennsylvania State Univ. - Univ. Park 7046
EXTENDED FIELD OBSERVATIONS OF CIRRUS CLOUDS USING A
GROUND BASED CLOUD OBSERVING SYSTEM
Period Obligations
02/28/1990-07/31/1994 FY94: \$0 TOTAL: \$261,367
Prin. Invest. NASA Tech. Officer CASE Category
T P ACKERMAN LARC/T OWENS 31-Atmos Sci
B A ALBRECHT

NAG 1-1350 Pennsylvania State Univ. - Univ. Park 7047
FINITE DIFFERENCE TIME DOMAIN MODELING OF STEADY STATE
SCATTERING FROM JET ENGINES WITH MOVING TURB
Period Obligations
09/25/1991-09/23/1993 FY94: \$0 TOTAL: \$237,513
Prin. Invest. NASA Tech. Officer CASE Category
R J LUEBBERS LARC/F B BECK 45-Elec Engr
K KUNZ LARC/M C GILREATH

NAG 1-1365 Pennsylvania State Univ. - Univ. Park 7048
ATMOSPHERE TURBULENCE EFFECTS ON SONIC BOOMS
Period Obligations
03/27/1992-03/18/1993 FY94: TOTAL: \$112,421
Prin. Invest. NASA Tech. Officer CASE Category
A D PIERCE LARC/G L MCANINCH 41-Aero Engr
V W SPARROW LARC/W L WILLSHIRE

NAG 1-1367 Pennsylvania State Univ. - Univ. Park 7049
COMPUTATIONAL AEROACOUSTICS USING NONLINEAR CFD
TECHNIQUES ON PARALLEL COMPUTERS
Period Obligations
01/15/1992-12/31/1994 FY94: \$50,000 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
L N LONG LARC/J W POSEY 41-Aero Engr
LARC/W R WATSON

NAG 1-1371 Pennsylvania State Univ. - Univ. Park 7050
ANALYSIS OF IMAGE SEQUENCES FROM SENSORS FOR
RESTRICTED-VISIBILITY OPERATIONS
Period Obligations
01/31/1992-05/31/1994 FY94: \$0 TOTAL: \$207,218
Prin. Invest. NASA Tech. Officer CASE Category
R KASTURI LARC/R L HARRIS 29-Math/Computer, NEC
LARC/V M BATSON

NAG 1-1377 Pennsylvania State Univ. - Univ. Park 7051
DEVELOPMENT OF (NZP) BASED LOW EXPANSION MATERIALS FOR
OXIDATION PROTECTIVE COATINGS ON CARBON—CARBO
Period Obligations
01/31/1992-07/23/1993 FY94: \$0 TOTAL: \$80,888
Prin. Invest. NASA Tech. Officer CASE Category
R ROY LARC/W L VAUGHN 47-Materials Engr
D K AGRAWAL

NAG 1-1409 Pennsylvania State Univ. - Univ. Park 7052
UARS CORRELATIVE MEASUREMENTS OF WATER VAPOR IN THE
MIDDLE ATMOSPHERE BY GROUND-BASED MICROWAVE
Period Obligations
03/04/1992-03/02/1993 FY94: TOTAL: \$64,000
Prin. Invest. NASA Tech. Officer CASE Category
J J OLIVERO LARC/J G WELLS 31-Atmos Sci
C L CROSKY

NAG 1-1412 Pennsylvania State Univ. - Univ. Park 7053
DEVELOPMENT OF A NEW OPTICAL INSTRUMENT FOR TURBULENCE
MEASUREMENTS
Period Obligations
03/24/1992-03/22/1995 FY94: \$70,000 TOTAL: \$208,000
Prin. Invest. NASA Tech. Officer CASE Category
G S SETTLES LARC/L M WEINSTEIN 41-Aero Engr

NAG 1-1417 Pennsylvania State Univ. - Univ. Park 7054
SYNTHESIS OF ROBUST AND RELIABLE CONTROLLERS FOR
FLEXIBLE SPACE STRUCTURES WITH UNCERTAIN PARAMETER
Period Obligations
04/01/1992-09/13/1993 FY94: \$0 TOTAL: \$15,825
Prin. Invest. NASA Tech. Officer CASE Category
A RAY LARC/K B LIM 42-Astro Engr

NAG 1-1441 Pennsylvania State Univ. - Univ. Park 7055
EEG AND CHAOS: DESCRIPTION OF UNDERLYING DYNAMICS AND
ITS RELATION TO DISSOCIATIVE STATES
Period Obligations
06/25/1992-12/31/1995 FY94: \$75,000 TOTAL: \$112,619
Prin. Invest. NASA Tech. Officer CASE Category
M J RAY LARC/A T POPE 69-Psych, NEC

NAG 1-1479 Pennsylvania State Univ. - Univ. Park 7056
COMPUTATIONAL AEROACOUSTICS AND NUMERICAL SIMULATION
OF SUPERSONIC JETS NLPN 92-1121
Period Obligations
02/25/1993-02/24/1995 FY94: \$99,657 TOTAL: \$194,048
Prin. Invest. NASA Tech. Officer CASE Category
P J MORRIS LARC/W E ZORUMSKI 41-Aero Engr
L N LONG

NAG 1-1504 Pennsylvania State Univ. - Univ. Park 7057
VALIDATION OF FDTD SCATTERING FROM REALISTIC TARGETS
NLPN 93-213
Period Obligations
04/21/1993-04/20/1994 FY94: \$0 TOTAL: \$65,789
Prin. Invest. NASA Tech. Officer CASE Category
R J LUEBBERS LARC/F B BECK 45-Elec Engr

NAG 1-1547 Pennsylvania State Univ. - Univ. Park 7058
EXTENDED FIELD OBSERVATIONS OF CIRRUS CLOUDS USING A
GROUND-BASED CLOUD OBSERVING SYSTEM NLPN 93-70
Period Obligations
09/28/1993-11/30/1994 FY94: \$0 TOTAL: \$82,000
Prin. Invest. NASA Tech. Officer CASE Category
T P ACKERMAN LARC/D S MCDUGAL 31-Atmos Sci
B A ALBRECHT LARC/T L OWENS

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NAG 1-1554 Pennsylvania State Univ. - Univ. Park 7059
A FUNDAMENTAL STUDY OF LASER BEAM WELDING ALUMINUM
LITHIUM ALLOY 2195 FOR CRYOGNEIC TANKAGE APPLICAT

Period	Obligations	
11/24/1993-03/31/1995	FY94: \$49,985	TOTAL: \$49,985
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R P MARTUKANITZ	LARC/C L LACH	47-Materials Engr
	LARC/D M ROYSTER	

NAG 1-1557 Pennsylvania State Univ. - Univ. Park 7060
ACTIVE MINIMIZATION OF ENERGY DENSITY IN THREE-
DIMENSIONAL ENCLOSURES

Period	Obligations	
01/12/1994-12/14/1994	FY94: \$59,053	TOTAL: \$59,053
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S D SOMMERFELDT	LARC/V L METCALF	49-Engr, NEC
	LARC/R J SILCOX	

NAG 1-1638 Pennsylvania State Univ. - Univ. Park 7061
SONIC BOOM NOISE PENETRATION INTO THE OCEAN MY 1/3

Period	Obligations	
08/15/1994-08/14/1995	FY94: \$10,000	TOTAL: \$10,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V W SPARROW	LARC/G L MCANINCH	41-Aero Engr

NAG 2-751 Pennsylvania State Univ. - Univ. Park 7062
LABORATORY INVESTIGATIONS OF THE MICROPHYSICS AND C
HEMISTRY OF AQUEOUS PARTICLES TYPICAL OF THE

Period	Obligations	
12/13/1991-10/31/1995	FY94: \$100,000	TOTAL: \$297,588
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W H BRUNE	ARC/E P CONDON	31-Atmos Sci
D LAMB		
B KENDALL		

NAG 2-781 Pennsylvania State Univ. - Univ. Park 7063
EXPERIMENTS ON CROSSING-SHOCK WAVE-BOUNDARY LAYER
INTERACTIONS IN SUPPORT OF CFD CODE VALIDATION

Period	Obligations	
05/14/1992-06/14/1993	FY94: \$0	TOTAL: \$75,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G S SETTLES	ARC/C C HORSTMAN	41-Aero Engr
	ARC/J G MARVIN	

NAG 2-826 Pennsylvania State Univ. - Univ. Park 7064
PARTICIPATION AS MISSION SCIENTIST FOR THE SPADEII MISSION

Period	Obligations	
02/22/1993-01/31/1995	FY94: \$264,000	TOTAL: \$294,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W BRUNE	ARC/E CONDON	31-Atmos Sci

NAG 2-867 Pennsylvania State Univ. - Univ. Park 7065
ADVANCED METHODS FOR COMPUTATIONAL ELECTROMAGNETIC
S: FINITE DIFFERENT TIME DOMAIN

Period	Obligations	
08/11/1993-10/14/1994	FY94: \$0	TOTAL: \$138,313
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J LUEBBERS	ARC/A C WOO	45-Elec Engr
L N LONG	ARC/M J SCHUH	

NAG 3-555 Pennsylvania State Univ. - Univ. Park 7066
3-D FLOW FIELD IN A TURBINE NOZZLE AND ROTOR BLADE
ROWS

Period	Obligations	
06/18/1984-03/09/1995	FY94: \$61,500	TOTAL: \$602,062
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B LAKSHMINARAYANA	LERC/R J BOYLE	41-Aero Engr
	LERC/R E GAUGLER	

NAG 3-989 Pennsylvania State Univ. - Univ. Park 7067
A LIQUID CRYSTAL BASED DIGITAL

Period	Obligations	
02/06/1989-10/30/1993	FY94: \$0	TOTAL: \$121,490
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C CAMCI	LERC/S A HIPPENSTEELE	46-Mech Engr
	LERC/C M SPUCKLER	

NAG 3-991 Pennsylvania State Univ. - Univ. Park 7068
CHEMICAL KINETICS OF AIR PROPULSION

Period	Obligations	
02/28/1989-12/31/1994	FY94: \$0	TOTAL: \$375,317
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M Y FRENKLACH	LERC/M J RABINOWITZ	12-Chemistry
	LERC/E A LEZBERG	

NAG 3-1020 Pennsylvania State Univ. - Univ. Park 7069
FLOWFIELD ANALYSIS OF LOW REYNOLDS NUMBER ROCKET E
NGINES

Period	Obligations	
03/27/1989-01/14/1995	FY94: \$25,000	TOTAL: \$249,952
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C L MERKLE	LERC/P F PENKO	41-Aero Engr

NAG 3-1044 Pennsylvania State Univ. - Univ. Park 7070
IGNITION AND COMBUSTION CHARACTERICTICS FO METALLIZE D
PROPELLANTS

Period	Obligations	
05/30/1989-05/31/1994	FY94: \$0	TOTAL: \$204,219
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S R TURNS	LERC/B PALASZEWSKI	46-Mech Engr

NAG 3-1052 Pennsylvania State Univ. - Univ. Park 7071
ANALYSIS OF FOIL BEARINGS FOR HIGH SPEED OPERATION IN
CRYOGENIC APPLICATIONS

Period	Obligations	
06/07/1989-01/31/1995	FY94: \$40,110	TOTAL: \$295,187
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M CARPINO	LERC/J F WALKER	46-Mech Engr

NAG 3-1168 Pennsylvania State Univ. - Univ. Park 7072
COMPUT AND TURLBUL MODELING FOR THE PRED OF UNSTEADY
FLOW FIELD DUE TO ROTOR/STATOR INTERACT IN TURBS

Period	Obligations	
05/10/1990-08/29/1995	FY94: \$0	TOTAL: \$179,833
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B LAKSHMINARAYANA	LERC/P M SOCKOL	41-Aero Engr

NAG 3-1222 Pennsylvania State Univ. - Univ. Park 7073
EXPERIMENTAL INVESTIGATION OF SPANWISE MIXING PHEN
OMENA AND 3D FLOW FIELD IN MULTISTAGE COMPRESSORS

Period	Obligations	
12/19/1990-05/16/1995	FY94: \$57,991	TOTAL: \$213,991
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B LAKSHMINARAYANA	LERC/A J STRAZISAR	41-Aero Engr
	LERC/J J ADAMCZYK	

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NAG 3-1225 Pennsylvania State Univ. - Univ. Park 7074
HIGH TEMPERATURE SENSOR/MICROPHONE DEVELOPMENT FOR
ACTIVE NOISE CONTROL
Period *Obligations*
01/03/1991-12/31/1993 FY94: \$0 TOTAL: \$180,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T R SHROUT LERC/D L NG 47-Materials Engr
LERC/W D WILLIAMS

NAG 3-1240 Pennsylvania State Univ. - Univ. Park 7075
FATIGUE MITIGATION CONTROL OF SPACE PROPULSION SYS TEMS
FOR HIGH PERFORMANCE AND EXTENDED LIFE
Period *Obligations*
02/21/1991-05/31/1994 FY94: \$0 TOTAL: \$276,249
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A RAY LERC/C F LOROUZO 46-Mech Engr
R B BHAGAT LERC/W C MERRILL
M CARPINO

NAG 3-1287 Pennsylvania State Univ. - Univ. Park 7076
THE GRAVITATIONAL ROLE IN LIQUID PHASE SINTERING
Period *Obligations*
07/03/1991-10/31/1994 FY94: \$0 TOTAL: \$524,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R M GERMAN LERC/R L DEWITT 47-Materials Engr

NAG 3-1309 Pennsylvania State Univ. - Univ. Park 7077
THE STABILITY OF A COMPRESSIBLE BOUNDARY LAYER WITHIN
A HIGH-AREA-RATIO NOZZLE
Period *Obligations*
01/15/1992-12/09/1993 FY94: \$0 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L L PAULEY LERC/R S JANKOVSKY 49-Engr, NEC

NAG 3-1341 Pennsylvania State Univ. - Univ. Park 7078
ANALYSIS OF REGEN COOLING OF ROCKET ENGINE COMBUSTORS
Period *Obligations*
05/08/1992-11/24/1993 FY94: \$0 TOTAL: \$43,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G S DULIKRAVICH LERC/K J BREISACHER 42-Astro Engr
C L MERKLE

NAG 3-1365 Pennsylvania State Univ. - Univ. Park 7079
QUANTITATIVE GUIDED WAVE ANALYSIS FOR ACUSTO-ULTRA
SONIC NDE
Period *Obligations*
09/09/1992-05/01/1995 FY94: \$18,000 TOTAL: \$43,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L ROSE LERC/A VARY 47-Materials Engr

NAG 3-1485 Pennsylvania State Univ. - Univ. Park 7080
DUCT FLOWS WITH VORTEX GENERATORS
Period *Obligations*
05/12/1993-10/14/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H McDONALD LERC/B H ANDERSON 41-Aero Engr

NAG 3-1492 Pennsylvania State Univ. - Univ. Park 7081
MIXING ENHANCEMENT IN SUPERSONIC SHEAR LAYERS
Period *Obligations*
05/07/1993-10/31/1994 FY94: \$0 TOTAL: \$99,992
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J MORRIS LERC/K Q ZAMAN 46-Mech Engr
D K MCLAUGHLIN

NAG 3-1563 Pennsylvania State Univ. - Univ. Park 7082
COMPUTATIONAL ASSESSMENT OF PLUG NOZZLES AS SUPERSONIC
JET NOISE SUPPRESSORS
Period *Obligations*
01/18/1994-01/13/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I S DAS LERC/E A KREJSA 41-Aero Engr
LERC/J F GROENEWEG

NAG 3-1586 Pennsylvania State Univ. - Univ. Park 7083
NEURAL-NETWORK-BASED ANALYSIS OF SPACE ACCELERATION
MEASUREMENT SYSTEM (SAMS) DATA
Period *Obligations*
04/04/1994-04/03/1995 FY94: \$65,000 TOTAL: \$65,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A SINHA LERC/C M GRODSINSKY 42-Astro Engr

NAG 3-1590 Pennsylvania State Univ. - Univ. Park 7084
EFFECTIVE GRADIENT - BASED AND GENETIC SEARCH METHODS
FOR MULTIOBJECTIVE OPTIMIZATION
Period *Obligations*
04/25/1994-04/24/1995 FY94: \$38,856 TOTAL: \$38,856
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A D BELEGUNDU LERC/P L MURTHY 41-Aero Engr
LERC/D A HOPKINS

NAG 3-1673 Pennsylvania State Univ. - Univ. Park 7085
INVESTIGATION OF ADVANCED CONTROL CONCEPTS FOR LIFE
EXTENSION OF AEROSPACE SYSTEM
Period *Obligations*
09/27/1994-09/26/1995 FY94: \$29,960 TOTAL: \$29,960
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A RAY LERC/C F LORENZO 46-Mech Engr
M CARPINO
MISZNAIER

NAG 5-100 Pennsylvania State Univ. - Univ. Park 7086
HIGH ANGULAR RESOLUTION X-RAY AND XUV ASTRONOMY
OBSERVATIONS
Period *Obligations*
10/01/1980-12/31/1994 FY94: \$759,263 TOTAL: \$5,968,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G P GARMIE GSFC/L J EARLY 11-Astronomy
GSFC/R H PLESS

NAG 5-643 Pennsylvania State Univ. - Univ. Park 7087
OPTIMIZATION OF BALLOON FILM TOUGHNESS
Period *Obligations*
04/01/1987-02/28/1995 FY94: \$131,000 TOTAL: \$1,286,928
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I R HARRISON GSFC/I S SMITH 99-Multi-Discip
J P HUNT GSFC/H C NEEDLEMAN

NAG 5-683 Pennsylvania State Univ. - Univ. Park 7088
MIDDLE ATMOSPHERE ELECTRODYNAMICS DURING A
THUNDERSTORM
Period *Obligations*
04/30/1991-05/31/1995 FY94: \$5,000 TOTAL: \$415,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C L CROSKEY GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)

NAG 5-1535 Pennsylvania State Univ. - Univ. Park 7089
 (1) VRO 42.05.01: A PROBE OF THE MULTI-PHASE ISM (2) SHADOWS
 IN THE SKY: NEARBY DARK CLOUDS AS A...
Period Obligations
 04/08/1991-04/14/1994 FY94: \$0 TOTAL: \$39,000
Prin. Invest NASA Tech. Officer CASE Category
 D N BURROWS GSFC/R PETRE 11-Astronomy

NAG 5-1678 Pennsylvania State Univ. - Univ. Park 7090
 PRE-MAIN SEQUENCE STARS IN THE CHAMAELEON CLOUD;
 PRE-MAIN SEQUENCE STARS IN THE RHO OPHIUCHI CLOUD
Period Obligations
 06/27/1991-12/31/1995 FY94: \$30,000 TOTAL: \$76,000
Prin. Invest NASA Tech. Officer CASE Category
 D FEIGELSON GSFC/R PETRE 11-Astronomy

NAG 5-1693 Pennsylvania State Univ. - Univ. Park 7091
 QOVUL; THE LONGEST PERIOD AM HER SYSTEM
Period Obligations
 07/15/1991-07/14/1993 FY94: TOTAL: \$19,698
Prin. Invest NASA Tech. Officer CASE Category
 J A NOUSEK GSFC/R PETRE 11-Astronomy

NAG 5-1698 Pennsylvania State Univ. - Univ. Park 7092
 CNO PROCESSING IN MASSIVE ALGOL BINARIES
Period Obligations
 07/15/1991-07/14/1994 FY94: \$0 TOTAL: \$40,674
Prin. Invest NASA Tech. Officer CASE Category
 R A WADE GSFC/D WEST 11-Astronomy

NAG 5-1708 Pennsylvania State Univ. - Univ. Park 7093
 DIFFUSE X-RAY BACKGROUND STUDIES
Period Obligations
 07/15/1991-07/14/1993 FY94: \$0 TOTAL: \$30,275
Prin. Invest NASA Tech. Officer CASE Category
 G P GARMIRE GSFC/R PETRE 11-Astronomy

NAG 5-1751 Pennsylvania State Univ. - Univ. Park 7094
 ROSAT STUDY OF X-RAY FLICKERING ON II PEGASI AND OBS OF
 FLARES IN II PEG THROUGH TIME SERIES SPECTROSC
Period Obligations
 08/15/1991-08/14/1994 FY94: \$0 TOTAL: \$10,000
Prin. Invest NASA Tech. Officer CASE Category
 D P HUENEMOERDER GSFC/R PETRE 11-Astronomy

NAG 5-1763 Pennsylvania State Univ. - Univ. Park 7095
 VARIOUS ROSAT STUDIES
Period Obligations
 09/06/1991-09/14/1995 FY94: \$14,713 TOTAL: \$84,599
Prin. Invest NASA Tech. Officer CASE Category
 F A DOMINIC GSFC/R PETRE 11-Astronomy
 CORDOVA

NAG 5-1786 Pennsylvania State Univ. - Univ. Park 7096
 X-RAY SHADOWS AND THE ORIGIN OF THE GALACTIC DIFFUSE
 X-RAY BACKGROUND AND ANALYSIS OF THE ROSAT OBS.
Period Obligations
 10/16/1991-10/31/1994 FY94: \$52,914 TOTAL: \$161,914
Prin. Invest NASA Tech. Officer CASE Category
 D N BURROWS GSFC/R PETRE 11-Astronomy

NAG 5-1810 Pennsylvania State Univ. - Univ. Park 7097
 NASA GODDARD EARTH SCIENCES GRADUATE STUDENT PROGR
 AM
Period Obligations
 09/23/1991-06/30/1994 FY94: \$5,500 TOTAL: \$49,500
Prin. Invest NASA Tech. Officer CASE Category
 G G MACE GSFC/D O STARR 31-Atmos Sci
 T P ACKERMAN GSFC/F EINAUDI

NAG 5-1831 Pennsylvania State Univ. - Univ. Park 7098
 QUIESCENT PROMINENCES IN ECLIPSING RS CVNS
Period Obligations
 11/22/1991-11/30/1992 FY94: TOTAL: \$11,998
Prin. Invest NASA Tech. Officer CASE Category
 L W RAMSEY GSFC/D WEST 11-Astronomy

NAG 5-1898 Pennsylvania State Univ. - Univ. Park 7099
 X-RAY SPECTRAL CHARACTERISTICS OF RS CVN SYSTEMS WITH
 AND WITHOUT MASS TRANSFER
Period Obligations
 02/20/1992-02/28/1994 FY94: \$0 TOTAL: \$33,215
Prin. Invest NASA Tech. Officer CASE Category
 L W RAMSEY GSFC/R PETRE 11-Astronomy

NAG 5-1899 Pennsylvania State Univ. - Univ. Park 7100
 VARIABILITY IN THE MULTI-COMPONENT X-RAY SPECTRA OF F
 AGN
Period Obligations
 02/20/1992-02/28/1993 FY94: \$0 TOTAL: \$35,000
Prin. Invest NASA Tech. Officer CASE Category
 F A CORDOVA GSFC/R PETRE 11-Astronomy

NAG 5-1909 Pennsylvania State Univ. - Univ. Park 7101
 THREE DIMENSIONAL STRUCTURE AND DEFORMATION OF TRA
 NSFORM PLATE BOUNDARIES: GOEDETIC AND MODELING.
Period Obligations
 02/24/1992-02/28/1995 FY94: \$54,000 TOTAL: \$156,000
Prin. Invest NASA Tech. Officer CASE Category
 K P FURLONG GSFC/B G BILLS 32-Geological Sci

NAG 5-1950 Pennsylvania State Univ. - Univ. Park 7102
 SEARCH FOR GALACTIC CORONAE
Period Obligations
 03/18/1992-03/31/1994 FY94: TOTAL: \$14,706
Prin. Invest NASA Tech. Officer CASE Category
 G P GARMIRE GSFC/R PETRE 11-Astronomy

NAG 5-1959 Pennsylvania State Univ. - Univ. Park 7103
 SEARCH FOR INVERSE COMPTON X-RAYS FROM THE LOBES OF
 FORYNAX A X-RAYS FROM RADIO GALAXIES STRADDLING
Period Obligations
 03/30/1992-04/14/1994 FY94: \$0 TOTAL: \$39,928
Prin. Invest NASA Tech. Officer CASE Category
 F D FEIGELSON GSFC/R PETRE 11-Astronomy

NAG 5-1968 Pennsylvania State Univ. - Univ. Park 7104
 FIFTH EPOCH DOPPLER IMAGING OBSERVATIONS OF AR LAC
 ERTAE AND SIMULTANEOUS X-RAY AND ULTRA-VIOLET.
Period Obligations
 04/09/1992-04/14/1994 FY94: \$0 TOTAL: \$31,000
Prin. Invest NASA Tech. Officer CASE Category
 J E NEFF GSFC/D WEST 11-Astronomy

NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)

NAG 5-2118 Pennsylvania State Univ. - Univ. Park 7105
 THE SPATIALLY-RESOLVED STRUCTURES OF THE V711 TAU
 STELLAR ENVIRONMENT
Period *Obligations*
 10/09/1992-03/31/1995 FY94: \$20,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J E NEFF GSFC/D WEST 11-Astronomy

NAG 5-2125 Pennsylvania State Univ. - Univ. Park 7106
 ADVANCED MODELS OF ACCRETION DISK ATMOSPHERES AND
 SPECTRA FOR CLOSE BINARY STARS
Period *Obligations*
 10/26/1992-10/31/1994 FY94: \$41,000 TOTAL: \$82,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 WADE GSFC/D WEST 11-Astronomy

NAG 5-2144 Pennsylvania State Univ. - Univ. Park 7107
 A SYSTEMATIC STUDY OF X-RAY EMISSION FROM ACTIVE S
 EMI-DETACHED SYSTEMS
Period *Obligations*
 11/23/1992-11/30/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R A WADE GSFC/R PETRE 11-Astronomy

NAG 5-2214 Pennsylvania State Univ. - Univ. Park 7108
 ORBITAL PERIOD CHANGES IN THE LOW MASS X-RAY BINAR Y
 EXO 0748-676
Period *Obligations*
 02/18/1993-02/28/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R H CORBET GSFC/R PETRE 11-Astronomy

NAG 5-2362 Pennsylvania State Univ. - Univ. Park 7109
 COSMOLOGICAL GAMMA-RAY BURST MODELS: SIGNATURES A ND
 CONSTRAINTS
Period *Obligations*
 09/09/1993-09/14/1995 FY94: \$49,520 TOTAL: \$49,520
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P I MESZAROS GSFC/J P NORRIS 11-Astronomy
 GSFC/N WHITE

NAG 5-2437 Pennsylvania State Univ. - Univ. Park 7110
 THE ERIDON BUBBLE
Period *Obligations*
 11/16/1993-11/30/1994 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D BURROWS GSFC/D WEST 11-Astronomy

NAG 5-2483 Pennsylvania State Univ. - Univ. Park 7111
 ASCA PV PHASE DATA ANALYSIS AND FRFREAD MAINTENANC E
Period *Obligations*
 02/08/1994-02/14/1995 FY94: \$79,994 TOTAL: \$79,994
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J NOUSEK GSFC/N E WHITE 11-Astronomy

NAG 5-2527 Pennsylvania State Univ. - Univ. Park 7112
 YOUNG STELLAR OBJECTS IN THE L1551 STAR FORMING CL OUD
Period *Obligations*
 02/28/1994-03/14/1995 FY94: \$12,500 TOTAL: \$12,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E D FEIGELSON GSFC/N WHITE 11-Astronomy

NAG 5-2528 Pennsylvania State Univ. - Univ. Park 7113
 IRON LINE DIAGNOSTICS OF NARROW EMISSION LINE GALA XIES
Period *Obligations*
 02/24/1994-03/14/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J A NOUSEK GSFC/N WHITE 11-Astronomy

NAG 5-2537 Pennsylvania State Univ. - Univ. Park 7114
 ASUKA OBSERVATIONS OF THE SNR VRO 42.05.01
Period *Obligations*
 02/28/1994-03/14/1995 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D N BURROWS GSFC/N WHITE 11-Astronomy

NAG 5-2701 Pennsylvania State Univ. - Univ. Park 7115
 AN ASSESSMENT OF THE RADIATIVE IMPACT OF CONTRAIL BASD
 ON ANALYSIS AND OBJECTIVE CLASSIFICATION
Period *Obligations*
 08/24/1994-08/31/1995 FY94: \$3,503 TOTAL: \$3,503
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T P ACKERMAN GSFC/R W STEWART 31-Atmos Sci

NAG 5-5015 Pennsylvania State Univ. - Univ. Park 7116
 COORDINATED STUDIES OF EQUATORIAL MESOSPHERIC AND
 LOWER THERMOSPHERIC DYNAMICS BY ROCKET AND CADRE
Period *Obligations*
 05/28/1993-12/31/1994 FY94: \$67,688 TOTAL: \$107,688
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J D RUSSELL GSFC/L J EARLY 13-Physics
 GSFC/R H PLESS

NAG 6-7 Pennsylvania State Univ. - Univ. Park 7117
 INVESTIGATE INFLUENCE OF AURORAL ENERGETICS AND
 ELECTRODYNAMIC COUPLING ON MIDDLE ATMOS ELEC PAR
Period *Obligations*
 09/01/1980-12/31/1994 FY94: \$0 TOTAL: \$1,000,460
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J D MITCHELL GSFC/L J EARLY 19-Phys Sci, NEC
 N C MAYNARD GSFC/R H PLESS
 R A GOLDBERG

NAG 8-136 Pennsylvania State Univ. - Univ. Park 7118
 SUPERCRITICAL DROPLET COMBUSTION WITH APPLICATION TO
 LIQUID-PROPELLANT ROCKET PERFORMANCE AND INSTABIL
Period *Obligations*
 03/22/1991-11/12/1994 FY94: \$88,733 TOTAL: \$249,375
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 V YANG MSFC/M ROCKER 41-Aero Engr
 MSFC/S D BAI

NAG 8-174 Pennsylvania State Univ. - Univ. Park 7119
 COMBUSTION OF LOX WITH HYDROGEN UNDER SUBSCRITICAL
 CRITICAL AND SUPERCRITICAL CONDITIONS
Period *Obligations*
 01/31/1991-07/01/1994 FY94: \$0 TOTAL: \$154,920
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K K KUO MSFC/K W GROSS 49-Engr, NEC
 W H HSIEH
 F B CHEUNG

NAG 8-231 Pennsylvania State Univ. - Univ. Park 7120
 X-RAY PULSATORS: PULSE PHASE SPECTROSCOPY
Period *Obligations*
 03/23/1992-09/22/1994 FY94: \$0 TOTAL: \$43,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R H CORBET MSFC/J VARGAS 31-Atmos Sci
 P I MESZAROS

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NAG 8-288 Pennsylvania State Univ. - Univ. Park 7121
CONTINUATION OF STUDIES
Period Obligations
05/12/1993-05/10/1995 FY94: \$0 TOTAL: \$36,246
Pnn. Invest. NASA Tech. Officer CASE Category
R CORBIN MSFC/J VARGAS 41-Aero Engr

NAG 8-807 Pennsylvania State Univ. - Univ. Park 7122
ELECTROPHORETIC SEPARATION OF CELLS
Period Obligations
12/11/1991-12/17/1992 FY94: TOTAL: \$376,526
Pnn. Invest. NASA Tech. Officer CASE Category
W C HYMER MSFC/R C DARTY 54-Env Biology
A MASTRO

NAG 8-879 Pennsylvania State Univ. - Univ. Park 7123
ANALYSIS FOR THERMAL-CHEMICAL DECOMPOSITION
Period Obligations
07/23/1991-07/22/1993 FY94: \$0 TOTAL: \$169,877
Pnn. Invest. NASA Tech. Officer CASE Category
N J SALAMON MSFC/M STUCKER 43-Chem Engr
MSFC/R AHMAD

NAG 8-903 Pennsylvania State Univ. - Univ. Park 7124
ANALYSIS OF THERMAL CYCLING EFFECTS ON THE LARGE
SEGEMENTED MIRROR FOR THE HIGH EARTH ORBIT TELESCO
Period Obligations
02/05/1992-12/31/1993 FY94: \$0 TOTAL: \$56,430
Pnn. Invest. NASA Tech. Officer CASE Category
R C THOMPSON MSFC/C CARRINGTON 31-Atmos Sci

NAG 8-953 Pennsylvania State Univ. - Univ. Park 7125
ELECTROPHORETIC SEPARATION OF CELLS AND PARTICLES FROM
RAT PITUITARY AND RAT SPLEEN.
Period Obligations
02/19/1993-03/07/1995 FY94: \$226,522 TOTAL: \$422,522
Pnn. Invest. NASA Tech. Officer CASE Category
W C HUMER MSFC/R C DARTY 51-Biological Sci
A M MASTRO

NAG 8-1067 Pennsylvania State Univ. - Univ. Park 7126
EHD FILM FORMATION STUDY
Period Obligations
06/30/1994-12/31/1994 FY94: \$6,300 TOTAL: \$6,300
Pnn. Invest. NASA Tech. Officer CASE Category
L CHANG MSFC/P B HALL 46-Mech Engr
MSFC/T R JETT

NAGW 1196 Pennsylvania State Univ. - Univ. Park 7127
CENTER FOR THE COMMERCIAL DEVELOPMENT OF SPACE
Period Obligations
10/16/1987-10/31/1994 FY94: \$1,737,057 TOTAL: \$12,931,608
Pnn. Invest. NASA Tech. Officer CASE Category
W HYMER HQ/W A ORAN 99-Multi-Discip
A MAESTRO HQ/A VILLAMIL

NAGW 1302 Pennsylvania State Univ. - Univ. Park 7128
INTERIM SUPPORT FOR MICROWAVE MEASUREMENTS OF
MESOPHERIC WATER VA
Period Obligations
04/18/1988-06/30/1994 FY94: \$0 TOTAL: \$855,342
Pnn. Invest. NASA Tech. Officer CASE Category
J OLIVERO HQ/M J KURYLO 31-Atmos Sci
C CROSKY HQ/M LUTHER

NAGW 1356 Pennsylvania State Univ. - Univ. Park 7129
CENTER FOR SPACE PROPULSION ENGINEERING
Period Obligations
07/18/1988-10/31/1994 FY94: \$1,250,000 TOTAL: \$8,327,898
Pnn. Invest. NASA Tech. Officer CASE Category
C L MERKLE HQ/E E VANLANDINGHAM 49-Engr, NEC

NAGW 1381 Pennsylvania State Univ. - Univ. Park 7130
ADVANCED HIGH TEMPERATURE COMPOSITE MATERIALS
Period Obligations
10/07/1988-10/31/1994 FY94: \$458,000 TOTAL: \$2,864,000
Pnn. Invest. NASA Tech. Officer CASE Category
R E TRESSLER HQ/B F QUIGLEY 47-Materials Engr
J R HELLMAN HQ/T W CROOKER
H T HAHN

NAGW 1522 Pennsylvania State Univ. - Univ. Park 7131
STUDIES OF HIGH ENERGY COMPACT SOURCES AND RADIATION
Period Obligations
11/30/1989-11/30/1994 FY94: \$82,000 TOTAL: \$421,000
Pnn. Invest. NASA Tech. Officer CASE Category
P I MESZAROS HQ/L J KALUZIENSKI 11-Astronomy
HQ/A N BUNNER

NAGW 1713 Pennsylvania State Univ. - Univ. Park 7132
SERVICE CHAIRING THE ASTROPHYSICS MASTER DIRECTORY
WORK. GRP
Period Obligations
05/01/1989-12/31/1992 FY94: \$0 TOTAL: \$241,522
Pnn. Invest. NASA Tech. Officer CASE Category
J NOUSEK HQ/J R WEISS 11-Astronomy
HQ/G R RIEGLER

NAGW 1911 Pennsylvania State Univ. - Univ. Park 7133
NAGW-1911/PENNSYLVANIA STATE UNIV/CONSTRAINTS IMPO SED
BY PALEOENVIRONMENTS ON THE ORIGIN AND EVOLUTIO
Period Obligations
02/06/1990-09/30/1994 FY94: \$76,000 TOTAL: \$353,546
Pnn. Invest. NASA Tech. Officer CASE Category
J F KASTING HQ/J D RUMMEL 31-Atmos Sci

NAGW 1920 Pennsylvania State Univ. - Univ. Park 7134
MULTIWAVELINK: AN INTERACTION DATA BASE FOR THE C
OORDINATION OF MULTIWAVELENGTH PROGRAMS
Period Obligations
01/19/1990-09/30/1993 FY94: \$0 TOTAL: \$501,235
Pnn. Invest. NASA Tech. Officer CASE Category
F A CORDOVA HQ/J WEISS 11-Astronomy
HQ/G RIEGLER

NAGW 2120 Pennsylvania State Univ. - Univ. Park 7135
MULTI WAVELENGTH AND STATISTICAL RESEARCH IN SPACE
ASRTOPHYSICS
Period Obligations
06/13/1990-12/31/1994 FY94: \$139,000 TOTAL: \$561,019
Pnn. Invest. NASA Tech. Officer CASE Category
E D FEIGELSON HQ/G S KUTTER 11-Astronomy
HQ/G R RIEGLER

NAGW 2209 Pennsylvania State Univ. - Univ. Park 7136
NAGW-2209/PENN STATE UNIV/ASSESSMENTS OF RADIATIVE
HEATING NEAR THE TROPICAL TROPOPAUSE
Period Obligations
09/17/1990-06/30/1994 FY94: \$0 TOTAL: \$112,388
Pnn. Invest. NASA Tech. Officer CASE Category
T P ACKERMAN HQ/R D MCPETERS 31-Atmos Sci
HQ/M J PRATHER

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NAGW 2280 Pennsylvania State Univ. - Univ. Park 7137
ORIGINS OF INTERSTELLAR AND SOLAR SYSTEM CARBONACEOUS MATERIALS

Period	Obligations	
02/22/1991-10/31/1994	FY94: \$0	TOTAL: \$135,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E D FEIGELSON	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 2603 Pennsylvania State Univ. - Univ. Park 7138
SPATIAL STRUCTURE AND DYNAMICS OF OUTER STELLAR ATMOSPHERES

Period	Obligations	
08/06/1991-04/30/1995	FY94: \$121,729	TOTAL: \$386,029
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J E NEFF	HQ/G S KUTTER	11-Astronomy
	HQ/G R RIEGLER	

NAGW 2647 Pennsylvania State Univ. - Univ. Park 7139
NAGW-2647/PENNSYLVANIA STATE UNIV/COMBINING REMOTE AND SURFACE MEASUREMENT TO ESTIMATE SOIL MOISTURE

Period	Obligations	
08/22/1991-11/30/1994	FY94: \$0	TOTAL: \$129,772
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T N CARLSON	HQ/G ASRAR	39-Env Sci, NEC
	HQ/D E WICKLAND	

NAGW 2670 Pennsylvania State Univ. - Univ. Park 7140
SECOND AIRBORNE ARCTIC STRATOSPHERIC EXPEDITION (AASEII)

Period	Obligations	
08/20/1991-09/30/1994	FY94: \$0	TOTAL: \$154,268
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W H BRUNE	HQ/M J KURYLO	31-Atmos Sci
	HQ/R F HAMPSON	

NAGW 2686 Pennsylvania State Univ. - Univ. Park 7141
NAGW-2686/PENN STATE UNIV/GLOBAL WATER CYCLE: EXTENSION ACROSS THE EARTH SCIENCES

Period	Obligations	
08/02/1991-12/31/1994	FY94: \$1,830,000	TOTAL: \$5,580,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E J BARRON	HQ/J C DODGE	31-Atmos Sci
	HQ/W S WILSON	

NAGW 2712 Pennsylvania State Univ. - Univ. Park 7142
PENNSYLVANIA STATE PARTICIPATING IN THE MINIMETER WAVE ATMOSPHERIC SOUNDER EXPERIMENT IN THE SPACE

Period	Obligations	
09/04/1991-12/31/1996	FY94: \$27,130	TOTAL: \$120,442
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J J OLIVERO	HQ/J A KAYE	31-Atmos Sci
	HQ/R E MURPHY	

NAGW 3136 Pennsylvania State Univ. - Univ. Park 7143
NAGW-3136/PENN STATE UNIV/RESEARCH AND PROJECT ACTIVITIES IN ASTROPHYSICS

Period	Obligations	
07/23/1992-06/30/1993	FY94: \$0	TOTAL: \$75,379
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D W WEEDMAN	HQ/L S LAPIANA	11-Astronomy

NAGW 3159 Pennsylvania State Univ. - Univ. Park 7144
A DETAILED INVESTIGATION INTO THE USE OF PLANETARY NEBULAE AS STANDARD CANDLES

Period	Obligations	
08/10/1992-07/31/1995	FY94: \$71,406	TOTAL: \$203,927
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R CIARDULLO	HQ/G R RIEGLER	11-Astronomy

NAGW 3171 Pennsylvania State Univ. - Univ. Park 7145
ADVANCED SPECTRUM MODELLING OF ACCRETION DISKS FOR CLOSE BINARY STARS

Period	Obligations	
08/14/1992-04/30/1995	FY94: \$102,411	TOTAL: \$267,688
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R WADE	HQ/G R RIEGLER	11-Astronomy

NAGW 3211 Pennsylvania State Univ. - Univ. Park 7146
NAGW-3211/PENN STATE UNIV/MULTIWAVELINK: AN INTERACTIVE DATA BASE FOR THE COORDINATION OF MULTIWAVELENGTH

Period	Obligations	
09/16/1992-07/31/1994	FY94: \$0	TOTAL: \$10,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F A CORDOVA	HQ/F GIOVANE	11-Astronomy
	HQ/G R RIEGLER	

NAGW 3333 Pennsylvania State Univ. - Univ. Park 7147
NAGW-3333/PENNSYLVANIA STATE UNIV/UP/MECHANISM OF DIFFERENTIAL GROWTH DURING GRAVITROPISM

Period	Obligations	
01/15/1993-10/31/1994	FY94: \$58,503	TOTAL: \$113,503
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D J COSGROVE	HQ/T W HALSTEAD	51-Biological Sci

NAGW 3358 Pennsylvania State Univ. - Univ. Park 7148
MICROGRAVITY IN VITRO OF BONE CELLS; FLOW EFFECTS

Period	Obligations	
01/29/1993-12/31/1994	FY94: \$50,000	TOTAL: \$100,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A FRANGOS	HQ/T W HALSTEAD	51-Biological Sci

NAGW 3372 Pennsylvania State Univ. - Univ. Park 7149
EXPERIMENTAL RHEO. OF THE VENUSIAN LITH.

Period	Obligations	
02/25/1993-12/31/1993	FY94: \$0	TOTAL: \$59,600
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S J MACKWELL	HQ/J M BOYCE	32-Geological Sci

NAGW 3405 Pennsylvania State Univ. - Univ. Park 7150
PLANETS AROUND NEUTRON STARS

Period	Obligations	
02/16/1993-02/28/1995	FY94: \$55,000	TOTAL: \$110,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A WOLSZCZAN	HQ/J A NUTH	19-Phys Sci, NEC

NAGW 3415 Pennsylvania State Univ. - Univ. Park 7151
INFRARED SPECTROSCOPY OF JUPITER AND SATURN

Period	Obligations	
03/09/1993-12/31/1994	FY94: \$125,286	TOTAL: \$257,667
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R F KNACKE	HQ/H C BRINTON	11-Astronomy

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NAGW 3571 Pennsylvania State Univ. - Univ. Park 7152
THE THEORY OF QSO ABSORPTION LINE SYSTEMS
Period Obligations
04/29/1993-12/31/1994 FY94: \$56,500 TOTAL: \$112,999
Pnn. Invest. NASA Tech. Officer CASE Category
J C CHARLTON HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3853 Pennsylvania State Univ. - Univ. Park 7153
PENN STATE / PULSATILE FLUID SHEAR IN BONE REMODELING
Period Obligations
01/14/1994-09/30/1994 FY94: \$80,000 TOTAL: \$80,000
Pnn. Invest. NASA Tech. Officer CASE Category
J A FRANGOS HQ/F M SULZMAN 56-Medical Sciences

NAGW 3929 Pennsylvania State Univ. - Univ. Park 7154
NAGW-3929/B PENN STATE UNIV. 'DEVEL. OF A MODEL O F ATM.
OXY. VARIATIONS TO EST...12-MO AWARD
Period Obligations
04/11/1994-04/30/1995 FY94: \$83,500 TOTAL: \$83,500
Pnn. Invest. NASA Tech. Officer CASE Category
R G NAJJAR HQ/R A SCHIFFER 39-Env Sci, NEC

NAGW 4124 Pennsylvania State Univ. - Univ. Park 7155
SPATIAL DISTRIBUTION OF CARBON MONOXIDE AND OTHER TRACE
MINERALS
Period Obligations
08/30/1994-03/31/1995 FY94: \$76,798 TOTAL: \$76,798
Pnn. Invest. NASA Tech. Officer CASE Category
R KNACKE HQ/J H RAHE 11-Astronomy

NAG10-137 Pennsylvania State Univ. - Univ. Park 7156
EXPERIMENTS IN SHORT TERM LIGHTNING FORECASTING USING
LDAR, UP FIELD MILL AND COMPANION METER DATA
Period Obligations
05/13/1994-08/02/1994 FY94: \$7,382 TOTAL: \$7,382
Pnn. Invest. NASA Tech. Officer CASE Category
G S FORBES KSC/L MAIER 31-Atmos Sci

NAS 5-31787 Pennsylvania State Univ. - Univ. Park 7157
DESIGN AND DEVELOPMENT OF DIGITAL PROCESSING UNIT
Period Obligations
10/01/1991-09/30/1998 FY94: \$148,000 TOTAL: \$712,600
Pnn. Invest. NASA Tech. Officer CASE Category
F CORDORA GSFC/R DONNELLY 42-Astro Engr

NAS 5-31827 Pennsylvania State Univ. - Univ. Park 7158
APPLIED RESEARCH - DEVELOPMENT OF ASTRO D ANALYSIS
SOFTWARE
Period Obligations
10/28/1991-12/31/1993 FY94: \$0 TOTAL: \$185,888
Pnn. Invest. NASA Tech. Officer CASE Category
J NOUSEK GSFC/N WHITE 11-Astronomy

NAS 5-32074 Pennsylvania State Univ. - Univ. Park 7159
ADP - RESEARCH STUDIES/SERVICES REFORMATTING AND
RETRIEVAL OF HEAO-1 DATA PRODUCTS
Period Obligations
11/24/1992-11/23/1995 FY94: \$41,300 TOTAL: \$117,100
Pnn. Invest. NASA Tech. Officer CASE Category
J A NOUSEK GSFC/R OLIVERSEN 11-Astronomy

NAS 5-32489 Pennsylvania State Univ. - Univ. Park 7160
CONVERSION OF TENMA AND GINGA DATABASES TO FITS
Period Obligations
01/27/1994-01/26/1995 FY94: \$70,000 TOTAL: \$70,000
Pnn. Invest. NASA Tech. Officer CASE Category
R CORBETT GSFC/D K WEST 19-Phys Sci, NEC

NAS 5-32669 Pennsylvania State Univ. - Univ. Park 7161
A NATIONAL STATISTICAL CONSULTING CENTER FOR THE
ASTRONOMICAL COMMUNITY
Period Obligations
07/27/1994-08/27/1996 FY94: \$30,000 TOTAL: \$30,000
Pnn. Invest. NASA Tech. Officer CASE Category
M AKRITAS GSFC/D WEST 11-Astronomy

NAS 8-38252 Pennsylvania State Univ. - Univ. Park 7162
AXAF CCD IMAGING SPECTROMETER
Period Obligations
06/27/1990-11/30/1999 FY94: \$807,000 TOTAL: \$1,811,000
Pnn. Invest. NASA Tech. Officer CASE Category
G P GARMERE MSFC/N B CUMINGS 11-Astronomy

NAS 8-38861 Pennsylvania State Univ. - Univ. Park 7163
RELIABILITY OF NAVIER-STOKES CODES THROUGH CONVERG
ENCE
Period Obligations
05/15/1991-11/14/1995 FY94: \$90,000 TOTAL: \$338,000
Pnn. Invest. NASA Tech. Officer CASE Category
C C MERKLE MSFC/G A WILHOLD 49-Engr, NEC
C S DULIKRAVICH MSFC/E T STEWART

NAS 8-38862 Pennsylvania State Univ. - Univ. Park 7164
AN EXPERIMENTAL STUDY OF CHARACTERISTIC COMBUSTION
DRIVEN FLOW FOR CFD VALIDATION
Period Obligations
04/16/1991-04/15/1996 FY94: \$100,000 TOTAL: \$435,000
Pnn. Invest. NASA Tech. Officer CASE Category
R J SANTORO MSFC/G A WILHOLD 41-Aero Engr
MSFC/P K TUCKER

NAS 8-38867 Pennsylvania State Univ. - Univ. Park 7165
TURBULENCE MODELLING AND COMPUTER OF TURBINE
AERODYNAMICS
Period Obligations
04/10/1991-12/31/1995 FY94: \$10,000 TOTAL: \$146,000
Pnn. Invest. NASA Tech. Officer CASE Category
B LAKSHMINARAYANA MSFC/L GRIFFIN 41-Aero Engr

NAS 8-39945 Pennsylvania State Univ. - Univ. Park 7166
FUEL STUDIES
Period Obligations
05/04/1994-11/03/1995 FY94: \$346,791 TOTAL: \$346,791
Pnn. Invest. NASA Tech. Officer CASE Category
K K KUO MSFC/R J HARWELL 49-Engr, NEC
MSFC/R L NICHOLS

NASW 4878 Pennsylvania State Univ. - Univ. Park 7167
BASIC RESEARCH ON ROBOT UMBILICALS FOR VIBRATION
ISOLATION OF MICROGRAVITY PAYLOADS
Period Obligations
05/12/1994-02/11/1995 FY94: \$55,673 TOTAL: \$55,673
Pnn. Invest. NASA Tech. Officer CASE Category
L E CROSS HQ/J LANDERS 46-Mech Engr

NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)

NCA 2-544 Pennsylvania State Univ. - Univ. Park 7168
 COMPUTATIONAL FLOW SIMULATION OF ARTIFICIAL HEARTS
Period *Obligations*
 07/13/1990-06/30/1993 FY94: \$0 TOTAL: \$78,953
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J M TARBELL ARC/D KWAK 43-Chem Engr

NCA 2-769 Pennsylvania State Univ. - Univ. Park 7169
 OPTIMIZATION OF THREE-DIMENSIONAL SINGED HYPERSONIC CONFIGURATIONS
Period *Obligations*
 11/23/1992-11/30/1994 FY94: \$0 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G S DULIKRAVICH ARC/J BOWLES 41-Aero Engr

NCC 2-370 Pennsylvania State Univ. - Univ. Park 7170
 MICROGRAVITY-INDUCED EFFECT ON PITUITARY GROWTH HORMONE CELL FUNCTION: A MECHANISM FOR MUSCLE ATRO
Period *Obligations*
 11/01/1987-10/31/1994 FY94: \$15,741 TOTAL: \$667,694
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W C HYMER ARC/C M WINGET 51-Biological Sci
 R E GRINDELAND ARC/R W BALLARD
 D R MORRISON

NCC 2-853 Pennsylvania State Univ. - Univ. Park 7171
 ALGORITHMS FOR DETECTION OF OBJECTS IN IMAGE SEQUENCES CAPTURED FROM AN AIRBORNE IMAGING SYSTEM
Period *Obligations*
 05/12/1994-02/28/1995 FY94: \$104,159 TOTAL: \$104,159
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R KASTURI ARC/B SRIDHAR 22-Computer Science
 ARC/R E SUORSA

NCC 8-46 Pennsylvania State Univ. - Univ. Park 7172
 TRIPROPELLANT COMBUSTION AND OXYGEN RICH ROCKET COMBUSTOR TECHNOLOGIES
Period *Obligations*
 07/26/1994-11/30/1994 FY94: \$269,892 TOTAL: \$269,892
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R J SANTORO MSFC/H P TRINH 41-Aero Engr

NCC 8-56 Pennsylvania State Univ. - Univ. Park 7173
 CRYSTAL RESEARCH
Period *Obligations*
 09/15/1994-09/14/1995 FY94: \$22,158 TOTAL: \$22,158
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G S DUBKAVICH MSFC/M P VOLZ 13-Physics
 MSFC/S L LEHOCZKY

NGT 00-010-006 Pennsylvania State Univ. - Univ. Park 7174
 NGT 10006/B PENN. ST. UNIV (MDAFP) 10/1/93 START
Period *Obligations*
 10/22/1993-03/31/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G S DULIKRAVICH HQ/G S SEIDEL 41-Aero Engr
 HQ/J R FACEY

NGT 00-030-042 Pennsylvania State Univ. - Univ. Park 7175
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 09/06/1991-12/31/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A M VOGELMANN HQ/D M BUTLER 31-Atmos Sci
 T P ACKERMAN HQ/G S WILSON

NGT 00-030-120 Pennsylvania State Univ. - Univ. Park 7176
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 10/29/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J H MATHER HQ/G ASRAR 33-Oceanography
 HQ/D M BUTLER

NGT 00-030-122 Pennsylvania State Univ. - Univ. Park 7177
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 11/02/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G E TUCKER HQ/G ASRAR 32-Geological Sci
 HQ/D M BUTLER

NGT 00-030-152 Pennsylvania State Univ. - Univ. Park 7178
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 10/21/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K L O'BRIEN HQ/G ASRAR 39-Env Sci, NEC
 HQ/D M BUTLER

NGT 00-040-002 Pennsylvania State Univ. - Univ. Park 7179
 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
 09/28/1989-01/31/1995 FY94: \$395,500 TOTAL: \$1,976,167
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R DEVON HQ/L T KEFFER 99-Multi-Discip

NGT 00-050-393 Pennsylvania State Univ. - Univ. Park 7180
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 10/06/1988-08/28/1993 FY94: \$0 TOTAL: \$58,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K HEID HQ/F C OWENS 99-Multi-Discip

NGT 00-050-706 Pennsylvania State Univ. - Univ. Park 7181
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 05/13/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A RAY HQ/F C OWENS 46-Mech Engr

NGT 00-050-803 Pennsylvania State Univ. - Univ. Park 7182
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 07/01/1991-07/31/1994 FY94: \$0 TOTAL: \$64,227
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G P GARMIRE HQ/F C OWENS 11-Astronomy

NGT 00-050-884 Pennsylvania State Univ. - Univ. Park 7183
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 05/26/1992-07/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C L MERKLE MSFC/F SIX 46-Mech Engr

NGT 00-050-952 Pennsylvania State Univ. - Univ. Park 7184
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 07/14/1992-08/14/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G S SETTLES ARC/M MOORE 46-Mech Engr

NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)

NGT 00-050-953 Pennsylvania State Univ. - Univ. Park 7185
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/26/1992-08/14/1993	FY94: \$0	TOTAL: \$22,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V YANG	MSFC/F SIX	46-Mech Engr

NGT 00-051-010 Pennsylvania State Univ. - Univ. Park 7186
 NGT-51010/PENNSYLVANIA STATE UNIV/GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
09/23/1992-08/23/1993	FY94: \$0	TOTAL: \$22,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M K HEID	HQ/D GALLAWAY	76-Sociology

NGT 00-051-016 Pennsylvania State Univ. - Univ. Park 7187
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/23/1993-08/14/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M K HEID	HQ/D V GALLAWAY	21-Mathematics

NGT 00-051-106 Pennsylvania State Univ. - Univ. Park 7188
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/14/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G KOODMANN	HQ/J T LYNCH	41-Aero Engr

NGT 00-051-118 Pennsylvania State Univ. - Univ. Park 7189
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
05/24/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L N LONG	LARC/E PRIOR	41-Aero Engr

NGT 00-051-119 Pennsylvania State Univ. - Univ. Park 7190
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/09/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
V YANG	MSFC/F SIX	46-Mech Engr

NGT 00-051-125 Pennsylvania State Univ. - Univ. Park 7191
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
07/07/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D BURROWS	HQ/D HOLLAND	13-Physics

NGT 00-051-131 Pennsylvania State Univ. - Univ. Park 7192
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/22/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H R ALLOCK	LERC/F MONTEGANI	12-Chemistry

NGT 00-051-165 Pennsylvania State Univ. - Univ. Park 7193
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/22/1993-08/14/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D A SANTAVICCA	MSFC/F SIX	46-Mech Engr

NGT 00-051-203 Pennsylvania State Univ. - Univ. Park 7194
 GRAD STUDENT RESEARCHERS PROGRAM

Period	Obligations	
04/25/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J SANTORO	MSFC/F SIX	46-Mech Engr

NGT 00-051-204 Pennsylvania State Univ. - Univ. Park 7195
 GRAD STUDENT RESEARCHERS PROGRAM

Period	Obligations	
04/25/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P R HOWELL	MSFC/F SIX	47-Materials Engr
J SINGH		

NGT 00-051-226 Pennsylvania State Univ. - Univ. Park 7196
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
08/16/1994-08/15/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C A BERNECKER	KSC/W CAMP	49-Engr, NEC

NGT 00-051-316 Pennsylvania State Univ. - Univ. Park 7197
 GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations	
06/14/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A WOLSZCZAN	HQ/D HOLLAND	11-Astronomy

NGT 00-070-204 Pennsylvania State Univ. - Univ. Park 7198
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
08/10/1990-07/31/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E D FEIGELSON	HQ/F C OWENS	11-Astronomy

NGT 00-070-257 Pennsylvania State Univ. - Univ. Park 7199
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
05/15/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J SANFORO	MSFC/F SIX	46-Mech Engr

NGT 00-070-299 Pennsylvania State Univ. - Univ. Park 7200
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
09/11/1992-08/14/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W J RAY	LARC/E PRIOR	69-Psych, NEC

NGT 00-070-328 Pennsylvania State Univ. - Univ. Park 7201
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM

Period	Obligations	
07/01/1993-06/30/1995	FY94: \$22,000	TOTAL: \$44,000
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J FRANGOS	HQ/D K RUSSELL	43-Chem Engr

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NGT 00-090-130 Pennsylvania State Univ. - Univ. Park 7202
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period 09/26/1992-08/14/1994 *Obligations* FY94: \$0 TOTAL: \$12,000
Prin. Invest. D DAVIS *NASA Tech. Officer* HQ/D K RUSSELL *CASE Category* 99-Multi-Discip

NAG 5-689 St. Vincent College & Seminary 7203
MODIFICATIONS OF AIRBORNE OCEANOGRAPHIC LIDAR FOR THE LONG RANGE P-3 MISSIONS
Period 02/28/1992-08/31/1993 *Obligations* FY94: \$0 TOTAL: \$44,440
Prin. Invest. R E BERRY *NASA Tech. Officer* GSFC/W B KRABILL *CASE Category* 19-Phys Sci, NEC
GSFC/F E HOGE

NAG 5-5017 St. Vincent College & Seminary 7204
AIRBORNE OCEANOGRAPHIC LIDAR ON LONG RANGE P-3 MISSIONS
Period 09/24/1993-09/30/1995 *Obligations* FY94: \$88,000 TOTAL: \$88,000
Prin. Invest. R E BERRY *NASA Tech. Officer* GSFC/W B KRABILL *CASE Category* 19-Phys Sci, NEC
GSFC/F E HOGE

NAG 8-199 Susquehanna University 7205
JOVE
Period 05/29/1991-06/03/1994 *Obligations* FY94: \$0 TOTAL: \$61,800
Prin. Invest. R KOZLOWSKI *NASA Tech. Officer* MSFC/N F SIX *CASE Category* 11-Astronomy
MSFC/C R CHAPPELL

NAG 5-1168 University of Pennsylvania 7206
HOT, MASSIVE BINARIES
Period 07/15/1989-09/30/1994 *Obligations* FY94: \$10,500 TOTAL: \$43,500
Prin. Invest. R H KOCH *NASA Tech. Officer* GSFC/D K WEST *CASE Category* 11-Astronomy

NAG 5-1473 University of Pennsylvania 7207
MODELLING OF NON-ISOTROPIC OUTFLOW IN COMETARY COMAE
Period 10/05/1990-10/31/1994 *Obligations* FY94: \$15,181 TOTAL: \$66,694
Prin. Invest. R KOCH *NASA Tech. Officer* GSFC/M J MUMMA *CASE Category* 11-Astronomy

NAG 9-597 University of Pennsylvania 7208
CO2/O2 INTERACTIONS IN EXTENSION OF TOLERANCE TO ACUTE HYPOXIA
Period 05/04/1992-04/01/1995 *Obligations* FY94: \$100,000 TOTAL: \$298,500
Prin. Invest. C J LAMBERTSEN *NASA Tech. Officer* JSC/J M WALIGORA *CASE Category* 56-Medical Sciences
J M CLARK JSC/M R POWELL

NAG 9-608 University of Pennsylvania 7209
AMS MEASUREMENTS OF 41CA 3601 AND 59M APPLICATION TO EXTRATERRESTRIAL MATERIALS
Period 05/21/1992-07/07/1993 *Obligations* FY94: \$0 TOTAL: \$45,000
Prin. Invest. R MIDDLETON *NASA Tech. Officer* JSC/I D BROWNE *CASE Category* 19-Phys Sci, NEC

NAGW 3616 University of Pennsylvania 7210
AMS MEASUREMENTS OF 41CA, 36CL, AND 59NI: APPLICATION TO EXTRATERRESTRIAL MATERIALS
Period 06/16/1993-05/31/1994 *Obligations* FY94: \$0 TOTAL: \$46,350
Prin. Invest. R MIDDLETON *NASA Tech. Officer* HQ/J BOYCE *CASE Category* 32-Geological Sci

NAGW 3628 University of Pennsylvania 7211
ENVIRONMENTAL BIOMEDICAL RESEARCH DATA CENTER
Period 06/03/1993-11/30/1994 *Obligations* FY94: \$192,000 TOTAL: \$317,000
Prin. Invest. C J LAMBERTSEN *NASA Tech. Officer* HQ/R J WHITE *CASE Category* 56-Medical Sciences

NAG10-122 University of Pennsylvania 7212
ACCESSIBILITY ANIMATION WITH GRAPHICAL HUMAN MODELS
Period 05/24/1993-04/23/1995 *Obligations* FY94: \$0 TOTAL: \$48,750
Prin. Invest. N I BODLER *NASA Tech. Officer* KSC/J R GOODIN *CASE Category* 56-Medical Sciences

NGT 00-050-688 University of Pennsylvania 7213
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period 10/30/1990-12/15/1993 *Obligations* FY94: \$0 TOTAL: \$66,000
Prin. Invest. H H BAU *NASA Tech. Officer* HQ/F C OWENS *CASE Category* 46-Mech Engr

NGT 00-050-729 University of Pennsylvania 7214
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period 08/12/1991-08/31/1994 *Obligations* FY94: \$0 TOTAL: \$66,000
Prin. Invest. R P PAUL *NASA Tech. Officer* HQ/F C OWENS *CASE Category* 46-Mech Engr

NGT 00-070-359 University of Pennsylvania 7215
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period 08/31/1993-08/31/1994 *Obligations* FY94: \$0 TOTAL: \$22,000
Prin. Invest. V KUMAR *NASA Tech. Officer* HQ/D K RUSSELL *CASE Category* 46-Mech Engr

NGT 00-090-241 University of Pennsylvania 7216
UNIV PA; UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period 03/03/1994-08/15/1994 *Obligations* FY94: \$12,000 TOTAL: \$12,000
Prin. Invest. C INGRUM *NASA Tech. Officer* HQ/D K RUSSELL *CASE Category* 99-Multi-Discip

NAG 3-603 University of Pittsburgh 7217
LOW TEMP LUMINESCENCE RAMAN SCATTERING AND RBS/CHANNELLING OF B SIC-CVD FILMS
Period 01/24/1985-01/09/1995 *Obligations* FY94: \$45,000 TOTAL: \$335,985
Prin. Invest. W J CHOYKE *NASA Tech. Officer* LERC/J A POWELL *CASE Category* 13-Physics
LERC/L G MATUS

NAG 3-945	University of Pittsburgh	7218
HIGH FREQUENCY TEMPERATURE CHARACTERIZATION		
<i>Period</i>	<i>Obligations</i>	
10/26/1988-10/19/1994	FY94: \$0	TOTAL: \$288,907
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W R WIESERMAN	LERC/G E SCHWARZE	45-Elec Engr
NAG 3-1403 University of Pittsburgh 7219		
KINETIC AND TRANSPORT PHENOMENA IN A MICROGRAVITY ENVIRONMENT		
<i>Period</i>	<i>Obligations</i>	
01/06/1993-12/31/1994	FY94: \$109,000	TOTAL: \$218,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D JASNOW	LERC/A T CHAI	19-Phys Sci, NEC
NAG 3-1439 University of Pittsburgh 7220		
ANALYSIS OF HEAT TRANSFER IN AN ABSORBING EMITTING MEDIUM - APPLICATION TO PYROMETRY		
<i>Period</i>	<i>Obligations</i>	
01/20/1993-02/08/1995	FY94: \$29,683	TOTAL: \$79,544
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C C HWANG	LERC/D L NG	46-Mech Engr
NAG 3-1545 University of Pittsburgh 7221		
SYSTEM DESIGN OF SHARED POWER FOR SPACE AND PLANET S		
<i>Period</i>	<i>Obligations</i>	
11/09/1994-11/08/1995	FY94: \$68,204	TOTAL: \$68,204
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G L KUSIC	LERC/R C CULL	45-Elec Engr
NAG 3-1583 University of Pittsburgh 7222		
BEARING DESIGN ANALYSIS USING POWER LUBRICANTS		
<i>Period</i>	<i>Obligations</i>	
03/25/1994-03/24/1995	FY94: \$44,981	TOTAL: \$44,981
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M M KHONSARI	LERC/D E BREWE	46-Mech Engr
	LERC/M V ZELLER	
NAG 5-609 University of Pittsburgh 7223		
A SOUNDING ROCKET STUDY OF N2O, NO AND OTHER T ROD CONSTITUENTS IN THE UPPER STRATOSPHERE AND MESOSP		
<i>Period</i>	<i>Obligations</i>	
07/01/1982-05/31/1995	FY94: \$90,000	TOTAL: \$1,589,067
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E C ZIPF	GSFC/L J EARLY	13-Physics
P W ERDMAN	GSFC/R H PLESS	
NAG 5-661 University of Pittsburgh 7224		
SUBORBITAL PROGRAM IN MAGNETOSPHERIC AND IONSPHERIC PHYSICS		
<i>Period</i>	<i>Obligations</i>	
05/04/1990-07/31/1995	FY94: \$304,670	TOTAL: \$724,670
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E C ZIPF	GSFC/L J EARLY	13-Physics
	GSFC/R H PLESS	
NAG 5-1717 University of Pittsburgh 7225		
THE INSTRINSIC 1-10KEV X-RAY SPECTRUM OF HIGH LUMINOSITY QSOS		
<i>Period</i>	<i>Obligations</i>	
08/12/1991-08/14/1994	FY94: \$6,000	TOTAL: \$34,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C HAZARD	GSFC/R PETRE	11-Astronomy
NAG 5-1778 University of Pittsburgh 7226		
UV STUDIES OF ABUNDANCES IN BAL QSOS AND DAMPED LYMA N-ALPHA ABSORPTION FROM LOW TO MODERATE . . .		
<i>Period</i>	<i>Obligations</i>	
09/27/1991-01/31/1995	FY94: \$22,240	TOTAL: \$85,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D A TURNSHEK	GSFC/D WEST	11-Astronomy
NAG 5-2411 University of Pittsburgh 7227		
WHAT DRIVES THE WINDS OF WOLF-RAYET STARS		
<i>Period</i>	<i>Obligations</i>	
10/28/1993-10/31/1994	FY94: \$30,000	TOTAL: \$30,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R E LADBECK	GSFC/D WEST	11-Astronomy
NAG 5-2495 University of Pittsburgh 7228		
BASELINEING THE UV PROPERTIES OF SLASH STARS		
<i>Period</i>	<i>Obligations</i>	
02/08/1994-02/14/1995	FY94: \$2,499	TOTAL: \$2,499
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R S LADBECK	GSFC/D WEST	11-Astronomy
NAG 8-959 University of Pittsburgh 7229		
NUCLEATION AND CHIRAL SYMETRY BREAKING UNDER HYDRODYNAMIC FLOWS		
<i>Period</i>	<i>Obligations</i>	
06/02/1993-06/14/1995	FY94: \$60,000	TOTAL: \$120,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
X L WU	MSFC/D NOEVER	19-Phys Sci, NEC
NAG 8-1049 University of Pittsburgh 7230		
OVI EMISSION AND BROAD-BAND UV SPECTRA OF SYMBIO- TIC SYSTEMS		
<i>Period</i>	<i>Obligations</i>	
03/17/1994-02/28/1995	FY94: \$44,816	TOTAL: \$44,816
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B R ESPEY	MSFC/J OWENS	31-Atmos Sci
NAG 8-1073 University of Pittsburgh 7231		
THE EXTENDED ATMOSPHERES OF WOLF-RAYET STARS		
<i>Period</i>	<i>Obligations</i>	
04/01/1994-02/28/1995	FY94: \$53,134	TOTAL: \$53,134
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R E SCHULTE-LADBECK	MSFC/J OWENS	11-Astronomy
NAGW 1270 University of Pittsburgh 7232		
SEARCH FOR PLANETARY SYSTEMS		
<i>Period</i>	<i>Obligations</i>	
04/15/1988-11/30/1996	FY94: \$107,500	TOTAL: \$730,498
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J P WEFEL	HQ/J H RAHE	11-Astronomy
NAGW 1764 University of Pittsburgh 7233		
ELECTRON ION RECOMBINATION AND ION MOLECULE REACTION PROCESS		
<i>Period</i>	<i>Obligations</i>	
05/17/1989-10/14/1994	FY94: \$111,633	TOTAL: \$524,368
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R JOHNSEN	HQ/J T BERGSTRALH	11-Astronomy

**NASA'S UNIVERSITY PROGRAM
PENNSYLVANIA (Continued)**

NAGW 2060 University of Pittsburgh 7234
PHOTOMETRIC ANALYSIS OF SPACECRAFT PLANETARY IMAGE S
Period 04/06/1990-10/31/1994 *Obligations* FY94: \$70,000 TOTAL: \$323,900
Prin. Invest. NASA Tech. Officer CASE Category
B HAPKE HQ/T A MAXWELL 32-Geological Sci

NAGW 2977 University of Pittsburgh 7235
SPECTROPOLARIMETRY AS A PROBE OF THE ATMOSPHERIC S
TRUCTURE FOR WOLF-RAYET STARS
Period 03/12/1992-12/31/1993 *Obligations* FY94: \$15,000 TOTAL: \$44,629
Prin. Invest. NASA Tech. Officer CASE Category
R E LADBECK HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3231 University of Pittsburgh 7236
NAGW-3231/UNIV PITTSBURGH/PUBLIC DISPLAY OF ASTRON
OMICAL DATA AT PITTSBURGH NEW CARNEGIE SCIENCE
Period 11/02/1992-07/31/1994 *Obligations* FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
P C HAZARD HQ/L LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 3238 University of Pittsburgh 7237
NAGW-3238/UNIV PITTSBURGH/ASTRONOMY AND SCIENCE
EDUCATION FOR ELEMENTARY SCHOOL STUDENTS
Period 11/02/1992-07/31/1993 *Obligations* FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
P D TURNSHEK HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 3239 University of Pittsburgh 7238
NAGW-3239/UNIV PITTSBURGH/HIGH SCHOOL WORKSHOP:
MODERN ASTRONOMY AT ALLEGHENY OBSERVATORY
Period 10/21/1992-10/31/1993 *Obligations* FY94: \$0 TOTAL: \$5,000
Prin. Invest. NASA Tech. Officer CASE Category
P R HQ/L LAPIANA 11-Astronomy
SCHULTE-LADBECK HQ/G P NEWTON

NAGW 3828 University of Pittsburgh 7239
NAGW 3828/B UNIV OF PITTSBURGH 'NON-LTE LINE BLANK ETED
MODEL ATMOSPHERES' 1/1/94 START
Period 12/09/1993-12/31/1994 *Obligations* FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. NASA Tech. Officer CASE Category
D J HILLIER HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3842 University of Pittsburgh 7240
MODELS FOR THE EMPLACEMENT OF LAVA FLOWS: STYLES O F
EFFUSIVE VOLCANISM ON MARS
Period 01/03/1994-12/31/1996 *Obligations* FY94: \$47,718 TOTAL: \$47,718
Prin. Invest. NASA Tech. Officer CASE Category
D CROWN HQ/R J WILLIAMS 32-Geological Sci

NAS 9-18404 University of Pittsburgh 7241
DEFINITION PHASE FOR IML-2 EXPERIMENT 'HUMAN SLEEP AND
CIRCADIAN RYTHM'
Period 11/02/1990-04/01/1997 *Obligations* FY94: \$174,000 TOTAL: \$795,822
Prin. Invest. NASA Tech. Officer CASE Category
T H MONK JSC/J VILLARREAL 51-Biological Sci

NASW 4677 University of Pittsburgh 7242
NASW-4677/UNIV OF PITTSBURGH/NASA RTTC LOCATED IN THE
MID-ATLANTIC REGION OF THE U.S.
Period 12/20/1991-12/31/1994 *Obligations* FY94: \$1,095,069 TOTAL: \$2,982,026
Prin. Invest. NASA Tech. Officer CASE Category
L S HUMMEL HQ/F E PENARANDA 99-Multi-Discip

NGT 00-051-348 University of Pittsburgh 7243
GRADUATE STUDENT RESEARCHERS PROGRAM
Period 08/24/1994-06/30/1995 *Obligations* FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
W L WE HQ/G A LESANE 13-Physics

NAG 5-382 Villanova University 7244
COORDINATED ULTROVIOLET SPECTROSCOPY AND OPTICAL
PHOTOMETRY OF SELECTED COOL STARS
Period 01/01/1984-09/30/1994 *Obligations* FY94: \$0 TOTAL: \$298,134
Prin. Invest. NASA Tech. Officer CASE Category
E F GUINAN GSFC/D WEST 11-Astronomy
F P MALONEY
S W WACKER

NAG 5-980 Villanova University 7245
SIMULTANEOUS IUE AND MAGNETIC OBSERVATIONS OF A
SELECTED YOUNG DWARF
Period 09/01/1987-09/30/1994 *Obligations* FY94: \$1,500 TOTAL: \$99,258
Prin. Invest. NASA Tech. Officer CASE Category
C AMBRUSTER GSFC/D WEST 11-Astronomy

NAG 5-1662 Villanova University 7246
X-RAY EMISSION OF THE SUN IN TMIE
Period 06/27/1991-06/30/1993 *Obligations* FY94: TOTAL: \$10,937
Prin. Invest. NASA Tech. Officer CASE Category
E F GUINAN GSFC/R PETRE 11-Astronomy

NAG 5-1836 Villanova University 7247
1. THE COOLING OF THE WHITE DWARF IN U GEM 2. DO DA
STARS HAVE WEAK WINDS AND IUE HIGH RESOLUTION
Period 11/26/1991-11/30/1994 *Obligations* FY94: \$13,560 TOTAL: \$47,527
Prin. Invest. NASA Tech. Officer CASE Category
E M SION GSFC/D WEST 11-Astronomy

NAG 5-2160 Villanova University 7248
1) THE PAST, PRESENT AND FUTURE SUN: AN IUE INVES T., OF
SOLAR PROXIES 2) UV CHROMOSPHERIC
Period 12/31/1992-01/31/1995 *Obligations* FY94: \$27,030 TOTAL: \$43,200
Prin. Invest. NASA Tech. Officer CASE Category
E F GUINAN GSFC/D WEST 11-Astronomy

NASA'S UNIVERSITY PROGRAM **PENNSYLVANIA (Continued)**

NAG 5-2278 Villanova University 7249
EUVE SPECTROSCOPY OF EXPOSED WD'S IN 3 CATAclySMIC
VARIABLES: PROBING ACCRETION PHYSICS FOR ...
Period Obligations
05/26/1993-06/14/1995 FY94: \$0 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
E SION GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2279 Villanova University 7250
CORONAL SPECTROSCOPY AND OUTER ATMOSPHERIC MODELLI
NG OF ZERO-AGE-MAIN-SEQUENCE K DWARFS ...
Period Obligations
07/15/1993-07/31/1995 FY94: \$0 TOTAL: \$51,560
Prin. Invest. NASA Tech. Officer CASE Category
C W AMBRUSTER GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2413 Villanova University 7251
CORONAL STRUCTURE, ROTATION AND ACTIVITY: A TEST USING
PLEIADES - AGE K DWARFS
Period Obligations
11/02/1993-11/14/1994 FY94: \$5,500 TOTAL: \$5,500
Prin. Invest. NASA Tech. Officer CASE Category
C AMBRUSTER GSFC/PETRE 11-Astronomy

NAG 5-2462 Villanova University 7252
IUE OBSERVATIONS OF AN X-RAY ANOMALOUS A-TYPE GIAN T
Period Obligations
01/11/1994-01/14/1995 FY94: \$2,500 TOTAL: \$2,500
Prin. Invest. NASA Tech. Officer CASE Category
J SIAH GSFC/D WEST 11-Astronomy

NAG 5-2463 Villanova University 7253
IUE ECHELLE INVESTIGATION OF THE PECULIAR HELIUM R ICH
DEGENERATE, PG 1346 + 082
Period Obligations
01/11/1994-01/14/1995 FY94: \$2,500 TOTAL: \$2,500
Prin. Invest. NASA Tech. Officer CASE Category
M HUANG GSFC/D WEST 11-Astronomy

NAG 5-2494 Villanova University 7254
EVOLUTION OF SOLAR CORONAL X-RAY EMISSION: ROSAT
OBSERVATIONS OF SOLAR PROXIES
Period Obligations
02/03/1994-02/14/1995 FY94: \$22,500 TOTAL: \$22,500
Prin. Invest. NASA Tech. Officer CASE Category
E F GUINAN GSFC/R PETRE 11-Astronomy

NAG 5-2707 Villanova University 7255
THE SUN IN TIME: THE HIGH-TEMPERATURE CORONAL STR UCTURE
OF SOLAR TYPE STARS
Period Obligations
08/31/1994-03/14/1996 FY94: \$20,000 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
E GUINAN GSFC/N E WHITE 11-Astronomy

NAGW 3726 Villanova University 7256
WHITE DWARFS IN CATAclySMIC VARIABLES
Period Obligations
08/31/1993-07/31/1994 FY94: \$0 TOTAL: \$32,622
Prin. Invest. NASA Tech. Officer CASE Category
E SION HQ/G R RIEGLER 11-Astronomy

NCA 2-797 Villanova University 7257
CONTINGENT ATTENTIONAL CAPTURE
Period Obligations
03/11/1993-03/14/1995 FY94: \$23,173 TOTAL: \$44,963
Prin. Invest. NASA Tech. Officer CASE Category
C L FOLK ARC/R REMINGTON 61-Biol Aspects

NCC 3-276 Westminster College 7258
INTERFEROMETRIC FRINGE ANALYSIS OF THE DENSITY REL
AXATION OF THE LIQ-VAPRO CRITICAL POINT FLUID SF6
Period Obligations
08/19/1992-12/31/1994 FY94: \$45,662 TOTAL: \$82,219
Prin. Invest. NASA Tech. Officer CASE Category
W L JOHNSON LERC/R A WILKINSON 13-Physics

RHODE ISLAND

NAG 1-1145 Brown University 7259
MULTI-DIMENSIONAL HIGH ORDER ESSENTIALLY NON--
OSCILLATORY FINITE DIFFERENCE METHODS IN GEN COORD
Period Obligations
05/23/1990-05/31/1995 FY94: \$15,000 TOTAL: \$82,500
Prin. Invest. NASA Tech. Officer CASE Category
C W SHU LARC/H L ATKINS 41-Aero Engr

NAG 1-1230 Brown University 7260
QUANTITATIVE AND PREDICTIVE MODELLING OF WALL BOUNDED
FLOWS -- MY
Period Obligations
02/26/1991-08/31/1994 FY94: \$1 TOTAL: \$80,342
Prin. Invest. NASA Tech. Officer CASE Category
L SIROVICH LARC/T B GATSKI 41-Aero Engr

NAG 2-830 Brown University 7261
THREE-DIMENSIONAL USER INTERFACES FOR SCIENTIFIC V
ISUALIZATION
Period Obligations
04/02/1993-03/31/1995 FY94: \$100,000 TOTAL: \$200,000
Prin. Invest. NASA Tech. Officer CASE Category
A DAM ARC/T A LASINSKI 22-Computer Science

NAG 3-1484 Brown University 7262
MIXING ENHANCEMENT IN HIGH SPEED JET FLOWS THROUGH
NONLINEAR MULTIPLE-FREQUENCY MODE INTERACTIONS
Period Obligations
05/04/1993-01/25/1995 FY94: \$80,000 TOTAL: \$162,700
Prin. Invest. NASA Tech. Officer CASE Category
J T LIU LERC/M D DAHL 41-Aero Engr

NAG 3-1648 Brown University 7263
COLLABORATION ON SEP MISSIONS TO THE MOON AND SMAL L
BODIES
Period Obligations
07/26/1994-07/25/1995 FY94: \$10,000 TOTAL: \$10,000
Prin. Invest. NASA Tech. Officer CASE Category
C M PIETERS (DR.) LERC/J M HICKMAN 19-Phys Sci, NEC

NASA'S UNIVERSITY PROGRAM
RHODE ISLAND (Continued)

NAG 5-2183 Brown University 7264
 PARTICIPATION IN THE MARS OBSERVER LASER ALTIMETER (MOLA) TEAM
Period *Obligations*
 02/09/1993-08/14/1994 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J W HEAD GSFC/D E SMITH 11-Astronomy

NAG 5-2629 Brown University 7265
 ANISOTROPY OF THE COSMIC MICROWAVE BACKGROUND ON LARGE AND MEDIUM ANGULAR SCALES
Period *Obligations*
 06/23/1994-06/30/1995 FY94: \$19,000 TOTAL: \$19,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P TIMBIE GSFC/E CHENG 11-Astronomy
 GSFC/R F SILVERBERG

NAG 9-109 Brown University 7266
 EXPERIMENTAL METAMORPHIC STUDIES/IRON-SU
Period *Obligations*
 05/01/1985-05/01/1994 FY94: \$0 TOTAL: \$416,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P C HESS JSC/I D BROWNE 47-Materials Engr

NAG 9-184 Brown University 7267
 MINERALOGY OF LUNAR MATERIALS
Period *Obligations*
 10/01/1986-10/01/1994 FY94: \$0 TOTAL: \$195,181
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C M PIETERS JSC/I D BROWNE 32-Geological Sci

NAG 9-575 Brown University 7268
 EXPERIMENTAL STUDY OF LUNAR AND SNC MAGMAS: ROLE OF VOLATILES
Period *Obligations*
 03/18/1992-04/01/1993 FY94: \$0 TOTAL: \$45,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M J RUTHERFORD JSC/I D BROWNE 19-Phys Sci, NEC

NAGW 28 Brown University 7269
 REMOTE SENSING INFORMATION APPLIED TO GEOLOGICAL STUDIES OF PLANETS
Period *Obligations*
 02/14/1980-09/30/1994 FY94: \$75,000 TOTAL: \$1,413,222
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C M PIETERS HQ/J R UNDERWOOD 32-Geological Sci
 HQ/J M BOYCE

NAGW 137 Brown University 7270
 GEOLOGIC PROCESSES ON THE GALILEAN SATELLITE: IMPACT CRATERING,
Period *Obligations*
 03/01/1981-10/31/1996 FY94: \$83,736 TOTAL: \$967,635
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J W HEAD HQ/J R UNDERWOOD 32-Geological Sci
 HQ/J M BOYCE

NAGW 705 Brown University 7271
 PLANETARY IMPACT PROCESSES
Period *Obligations*
 03/01/1985-09/30/1995 FY94: \$147,500 TOTAL: \$1,447,762
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P H SCHULTZ HQ/J R UNDERWOOD 32-Geological Sci
 HQ/J M BOYCE

NAGW 713 Brown University 7272
 VENUS DATA ANALYSIS - RADAR IMAGES/GLOBAL DATA SETS
Period *Obligations*
 03/01/1985-09/30/1994 FY94: \$111,953 TOTAL: \$603,896
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J W HEAD HQ/J R UNDERWOOD 32-Geological Sci
 HQ/J M BOYCE

NAGW 748 Brown University 7273
 REFLECTANCE EXPERIMENT LAB
Period *Obligations*
 05/01/1985-09/30/1994 FY94: \$103,136 TOTAL: \$674,992
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C M PIETERS HQ/J R UNDERWOOD 32-Geological Sci
 HQ/J M BOYCE

NAGW 855 Brown University 7274
 REGIONAL PLANETARY DATA FACILITY
Period *Obligations*
 11/01/1985-09/30/1994 FY94: \$47,954 TOTAL: \$322,081
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P H SCHULTZ HQ/J R UNDERWOOD 32-Geological Sci
 HQ/B M FRENCH

NAGW 1873 Brown University 7275
 GEOLOGICAL PROCESSES ON PLANETS AND SATELLITES: T ECTONISM
Period *Obligations*
 07/23/1990-09/30/1994 FY94: \$55,152 TOTAL: \$381,859
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J W HEAD HQ/T A MAXWELL 32-Geological Sci

NAGW 1928 Brown University 7276
 PLANETARY GEOPHYSICS AND TECTONICS
Period *Obligations*
 01/05/1990-10/31/1994 FY94: \$69,054 TOTAL: \$326,434
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E M PARMENTIER HQ/T A MAXWELL 32-Geological Sci

NAGW 2185 Brown University 7277
 GEOLOGICAL STUDIES OF PLANETS AND SATELLITES: PLAN ETARY VOLCANISM
Period *Obligations*
 07/23/1990-09/30/1994 FY94: \$112,000 TOTAL: \$827,086
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J W HEAD HQ/T A MAXWELL 32-Geological Sci

NAGW 2500 Brown University 7278
 PROBLEMS IN VOLCANOLOGY AND UNCONFORMABLE SURFACE DEPOSITS ON MARS
Period *Obligations*
 08/12/1991-01/31/1994 FY94: \$15,000 TOTAL: \$74,422
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J HEAD HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 2797 Brown University 7279
 FAR INFRARED DETECTORS FOR OBSERVATIONAL COSMOLOGY
Period *Obligations*
 01/03/1992-12/31/1994 FY94: \$83,345 TOTAL: \$252,895
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 P T TIMBIE HQ/J K ALEXANDER 11-Astronomy
 HQ/D A HOLLAND

NASA'S UNIVERSITY PROGRAM
RHODE ISLAND (Continued)

NAGW 3331 Brown University 7280 KINETIC AND THERMODYNAMIC STUDIES OF MELTING FREEZING OF HELIUM IN MICROGRAVITY <i>Period</i> 01/11/1993-12/31/1995 <i>Prin. Invest.</i> C ELBAUM <i>Obligations</i> FY94: \$110,000 NASA Tech. Officer HQ/M C LEE TOTAL: \$220,000 CASE Category 19-Phys Sci, NEC	NAGW 3633 Brown University 7288 EXPERIMENTAL STUDY OF LUNAR AND SNC MAGMAS: ROLE OF VOLATILES <i>Period</i> 06/16/1993-03/31/1995 <i>Prin. Invest.</i> M RUTHERFORD <i>Obligations</i> FY94: \$44,053 NASA Tech. Officer HQ/J BOYCE TOTAL: \$90,403 CASE Category 32-Geological Sci
NAGW 3359 Brown University 7281 THE DYNAMICS AND MORPHOLOGY OF SUPERFLUID HELIUM DROPS IN A MICROGRAVITY ENVIRONMENT <i>Period</i> 02/04/1993-12/31/1995 <i>Prin. Invest.</i> H J MARIS <i>Obligations</i> FY94: \$160,000 NASA Tech. Officer HQ/M C LEE TOTAL: \$300,000 CASE Category 13-Physics	NAGW 3709 Brown University 7289 MINERALOGY OF LUNAR MATERIALS FROM REFLECTANCE SPECTRA <i>Period</i> 08/10/1993-06/30/1994 <i>Prin. Invest.</i> C PIETERS <i>Obligations</i> FY94: \$0 NASA Tech. Officer HQ/RAHE TOTAL: \$26,790 CASE Category 32-Geological Sci
NAGW 3379 Brown University 7282 COMPOSITION, ALTERATION, AND REDISTRIBUTION OF LOW ALBEDO MATERIALS ON MARS FROM ISM DATA <i>Period</i> 02/16/1993-02/28/1995 <i>Prin. Invest.</i> J F MUSTARD <i>Obligations</i> FY94: \$38,685 NASA Tech. Officer HQ/J M BOYCE TOTAL: \$73,685 CASE Category 32-Geological Sci	NAGW 3756 Brown University 7290 MISSION OPERATIONS AND CALIBRATION OF CLEMENTINE DATA FOR MAXIMUM SCIENCE RETURN <i>Period</i> 09/17/1993-06/30/1996 <i>Prin. Invest.</i> C PIETERS <i>Obligations</i> FY94: \$65,000 NASA Tech. Officer HQ/H C BRINTON TOTAL: \$90,000 CASE Category 11-Astronomy
NAGW 3412 Brown University 7283 GEO. TRANS. FR. LOW. TO HIGH., SOUT. CHR. PLAN. AND NOR. XAN. TER., MAR. GEO. MAP. OF THE MTM ### QUAD <i>Period</i> 02/18/1993-02/28/1995 <i>Prin. Invest.</i> L S CRUMPLER <i>Obligations</i> FY94: \$10,000 NASA Tech. Officer HQ/J M BOYCE TOTAL: \$20,000 CASE Category 32-Geological Sci	NAGW 3773 Brown University 7291 NAGW-3773/BROWN UNIV/VENUS MAGMATISM FROM MAGELLAN DATA <i>Period</i> 11/04/1993-09/30/1995 <i>Prin. Invest.</i> J W HEAD <i>Obligations</i> FY94: \$70,000 NASA Tech. Officer HQ/J T BERGSTRALH TOTAL: \$70,000 CASE Category 32-Geological Sci
NAGW 3431 Brown University 7284 GEOLOGIC SIGNATURES OF ATMOSPHERIC EFFECTS ON IMPACT CRATERING ON VENUS <i>Period</i> 03/03/1993-12/31/1995 <i>Prin. Invest.</i> P H SCHULTY <i>Obligations</i> FY94: \$59,500 NASA Tech. Officer HQ/W J WAGNER HQ/G WITHBROE TOTAL: \$139,563 CASE Category 13-Physics	NAGW 3803 Brown University 7292 GEOLOGY AND GEOCHEMISTRY OF THE VENERA/BEGA LANDING SITES <i>Period</i> 10/29/1993-09/30/1995 <i>Prin. Invest.</i> A BASILEVSKY <i>Obligations</i> FY94: \$69,000 NASA Tech. Officer HQ/J T BERGSTRALH TOTAL: \$69,000 CASE Category 32-Geological Sci
NAGW 3486 Brown University 7285 RELATIONSHIP AND STRATIGRAPHIC ASSOCIATION OF THE SMALL VOLCANOS AND PLAINS TERRAIN OF VENUS <i>Period</i> 04/02/1993-03/14/1994 <i>Prin. Invest.</i> J C AUBELE <i>Obligations</i> FY94: \$0 NASA Tech. Officer HQ/J T BERGSTRALH TOTAL: \$26,176 CASE Category 32-Geological Sci	NCA 2-796 Brown University 7293 EFFECTS OF EXTREME ALTITUDE AND STRESS ON SOME ASPECTS OF SPEECH SYNTAX MEMORY AND COGNITION AT MT EVEREST <i>Period</i> 02/16/1993-08/31/1994 <i>Prin. Invest.</i> P LIEBERMAN <i>Obligations</i> FY94: \$0 NASA Tech. Officer ARC/B KANKI TOTAL: \$39,993 CASE Category 61-Biol Aspects
NAGW 3488 Brown University 7286 THE GABBRO ECLOGITE TRANSITION AND CRYSTAL RECYCLING ON VENUS <i>Period</i> 03/27/1993-03/14/1995 <i>Prin. Invest.</i> P C HESS <i>Obligations</i> FY94: \$46,800 NASA Tech. Officer HQ/J T BERGSTRALH TOTAL: \$111,800 CASE Category 32-Geological Sci	NCC 2-5041 Brown University 7294 VOICE MONITORING OF MOTOR CONTROL COGNITIVE ABILITY AND STRESS <i>Period</i> 03/18/1993-02/28/1995 <i>Prin. Invest.</i> P LIEBERMAN <i>Obligations</i> FY94: \$19,999 NASA Tech. Officer ARC/B KANKI TOTAL: \$19,999 CASE Category 69-Psych, NEC
NAGW 3613 Brown University 7287 EXPERIMENTAL STUDY OF CHEMICAL PHASE AND TEXTURAL EQUILIBRIUM OF HIGH TiO2 MARE BASALTS AND PERIDOTITE <i>Period</i> 06/11/1993-04/30/1995 <i>Prin. Invest.</i> P HESS <i>Obligations</i> FY94: \$82,014 NASA Tech. Officer HQ/RAHE TOTAL: \$128,571 CASE Category 32-Geological Sci	NGT 00-040-034 Brown University 7295 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM <i>Period</i> 04/03/1991-02/28/1995 <i>Prin. Invest.</i> P H SCHULTZ <i>Obligations</i> FY94: \$170,000 NASA Tech. Officer HQ/E T SCHWARTZ TOTAL: \$660,000 CASE Category 99-Multi-Discip

NASA'S UNIVERSITY PROGRAM
RHODE ISLAND (Continued)

NGT 00-050-558 Brown University NASA GRADUATE STUDENT RESEARCHERS PROGRAM Period: 06/26/1990-06/30/1994 Pnn. Invest. C M PIETERS FY94: \$0 NASA Tech. Officer HQ/F C OWENS Obligations TOTAL: \$88,000 CASE Category 12-Chemistry	NGT 00-051-262 Brown University GRADUATE STUDENT RESEARCHERS PROGRAM Period: 06/14/1994-06/30/1997 Pnn. Invest. G SEIDEL FY94: \$22,000 NASA Tech. Officer HQ/G LESANE Obligations TOTAL: \$22,000 CASE Category 13-Physics
NGT 00-050-755 Brown University NASA GRADUATE STUDENT RESEARCHERS PROGRAM Period: 09/17/1991-06/30/1994 Pnn. Invest. N M LAWANDY FY94: \$0 NASA Tech. Officer GSFC/G SOFFEN Obligations TOTAL: \$66,000 CASE Category 45-Elec Engr	NGT 00-051-350 Brown University GRADUATE STUDENT RESEARCHERS PROGRAM (UMDF) Period: 08/18/1992-06/30/1995 Pnn. Invest. P C HESS FY94: \$22,000 NASA Tech. Officer HQ/G A LESANE Obligations TOTAL: \$22,000 CASE Category 32-Geological Sci
NGT 00-050-795 Brown University NASA GRADUATE STUDENT RESEARCHERS PROGRAM Period: 06/28/1991-06/30/1994 Pnn. Invest. C M PIETERS FY94: \$0 NASA Tech. Officer HQ/F C OWENS Obligations TOTAL: \$66,000 CASE Category 32-Geological Sci	NGT 00-070-285 Brown University NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM Period: 07/09/1992-06/30/1995 Pnn. Invest. P C HESS FY94: \$22,000 NASA Tech. Officer HQ/J K ALEXANDER Obligations TOTAL: \$66,000 CASE Category 32-Geological Sci
NGT 00-050-917 Brown University NASA GRADUATE STUDENT RESEARCHERS PROGRAM Period: 06/29/1992-06/30/1995 Pnn. Invest. M J RUTHERFORD FY94: \$0 NASA Tech. Officer HQ/J ALEXANDER Obligations TOTAL: \$44,000 CASE Category 32-Geological Sci	NGT 00-070-326 Brown University NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM Period: 07/01/1993-06/30/1996 Pnn. Invest. J HEAD FY94: \$22,000 NASA Tech. Officer HQ/D K RUSSELL Obligations TOTAL: \$44,000 CASE Category 32-Geological Sci
NGT 00-050-922 Brown University NASA GRADUATE STUDENT RESEARCHERS PROGRAM Period: 06/30/1992-06/30/1995 Pnn. Invest. M J RUTHERFORD FY94: \$22,000 NASA Tech. Officer HQ/J ALEXANDER Obligations TOTAL: \$66,000 CASE Category 32-Geological Sci	NGT 00-070-370 Brown University NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM Period: 07/13/1994-06/30/1995 Pnn. Invest. G E KARNIADAKIS FY94: \$32,051 NASA Tech. Officer HQ/D RUSSELL Obligations TOTAL: \$32,051 CASE Category 46-Mech Engr
NGT 00-051-011 Brown University GRADUATE STUDENT RESEARCHERS PROGRAM Period: 02/09/1993-12/14/1994 Pnn. Invest. R H BRANDENBERGER FY94: \$22,000 NASA Tech. Officer GSFC/G SOFFEN Obligations TOTAL: \$44,000 CASE Category 13-Physics	NGT 00-090-234 Brown University UGSRP Period: 11/19/1993-08/14/1994 Pnn. Invest. D TARGAN FY94: \$12,000 NASA Tech. Officer HQ/D RUSSELL Obligations TOTAL: \$12,000 CASE Category 32-Geological Sci
NGT 00-051-029 Brown University GRADUATE STUDENT RESEARCHERS PROGRAM Period: 06/23/1993-06/30/1996 Pnn. Invest. P F FISHER FY94: \$7,000 NASA Tech. Officer HQ/J T LYNCH Obligations TOTAL: \$29,000 CASE Category 21-Mathematics	NGT 00-051-011 Brown University GRADUATE STUDENT RESEARCHERS PROGRAM Period: 02/09/1993-12/14/1994 Pnn. Invest. R H BRANDENBERGER FY94: \$22,000 NASA Tech. Officer GSFC/G SOFFEN Obligations TOTAL: \$44,000 CASE Category 13-Physics
NGT 00-051-058 Brown University GRADUATE STUDENT RESEARCHERS PROGRAM Period: 06/01/1993-06/30/1996 Pnn. Invest. P H SCHULTZ FY94: \$22,000 NASA Tech. Officer HQ/D HOLLAND Obligations TOTAL: \$44,000 CASE Category 32-Geological Sci	NAG 1-1222 University of Rhode Island DISTRIBUTIONS OF HYDROPEROXIDES: THEIR RELATIONSHIP TO OZONE AND OTHER OXIDANTS Period: 02/27/1991-05/31/1995 Pnn. Invest. B G HEIKES FY94: \$97,567 NASA Tech. Officer LARC/J D BARRICK Obligations TOTAL: \$417,567 CASE Category 31-Atmos Sci
NGT 00-051-187 Brown University GRADUATE STUDENT RESEARCHERS PROGRAM Period: 09/29/1993-08/31/1996 Pnn. Invest. P T TIMBIE FY94: \$44,000 NASA Tech. Officer GSFC/M BURRELL Obligations TOTAL: \$44,000 CASE Category 13-Physics	NAG 1-1225 University of Rhode Island CONCENTRATIONS OF MINERAL AEROSOL AND TRACE ELEMENTS IN ATMOSPHERE OF WESTERN PACIFIC AND RELATIONS Period: 02/27/1991-02/25/1996 Pnn. Invest. R ARIMOTO FY94: \$116,263 NASA Tech. Officer LARC/B E ANDERSON Obligations TOTAL: \$261,777 CASE Category 31-Atmos Sci

**NASA'S UNIVERSITY PROGRAM
RHODE ISLAND (Continued)**

NAG 1-1235 University of Rhode Island 7313
METEOROLOGICAL AND PHOTOCHEMICAL MODELING IN PEM WEST

Period	Obligations	
03/12/1991-08/31/1995	FY94: \$166,081	TOTAL: \$788,825
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J T MERRILL	LARC/J M HOELL	31-Atmos Sci
B HEIKES		

NAG 1-1395 University of Rhode Island 7314
HYDROPEROXIDE AND FORMALDEHYDE: AIRBORNE EQUATORIAL DISTRIBUTIONS AND RELATIONSHIPS TO OZONE

Period	Obligations	
03/09/1992-03/04/1995	FY94: \$0	TOTAL: \$223,362
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B G HEIKES	LARC/J D BARRICK	31-Atmos Sci
	LARC/J M HOELL	

NAG 3-1428 University of Rhode Island 7315
HIGH TEMPERATURE THIN FILM STRAIN SENSORS BASED ON ALUMINUM NITRIDE

Period	Obligations	
01/14/1993-02/08/1995	FY94: \$45,000	TOTAL: \$105,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
O J GREGORY	LERC/L C MARTIN	49-Engr. NEC

NAG 5-1844 University of Rhode Island 7316
SOURCE OF VOLCANIC AEROSOL: SULFUR SOLUBILITY AND DEGASSING OF MAGMAS

Period	Obligations	
12/10/1991-12/14/1994	FY94: \$59,989	TOTAL: \$162,989
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H SIGURDSSON	GSFC/L S WALTER	31-Atmos Sci
M J RUTHERFORD		
S CAREY		

NAGW 1891 University of Rhode Island 7317
OCEAN COLOR STUDIES OF THE EASTERN ATLANTIC

Period	Obligations	
12/07/1989-11/30/1994	FY94: \$188,464	TOTAL: \$762,453
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A YODER	HQ/M R LEWIS	33-Oceanography
	HQ/W S WILSON	

NAGW 2560 University of Rhode Island 7318
NAGW-2560/UNIV RHODE ISLAND/SATELLITE/IN-SITU INVENTORY INTEROPERABILITY: THE FIRST STEP

Period	Obligations	
06/13/1991-02/28/1994	FY94: \$0	TOTAL: \$494,266
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P CORNILLON	HQ/G HUNOLT	33-Oceanography
	HQ/D M BUTLER	

NAGW 2584 University of Rhode Island 7319
NAGW-2584/UNIV. RHODE ISLAND/SUPPORT FOR GORDON RESEARCH CONFERENCE ON ORIGINS OF SOLAR SYSTEMS

Period	Obligations	
07/31/1991-03/31/1994	FY94: \$0	TOTAL: \$32,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A G CAMERON	HQ/J A NUTH	11-Astronomy

NAGW 3009 University of Rhode Island 7320
A STUDY OF THE FORMATION OF SUBTROPICAL MODE WATER

Period	Obligations	
04/03/1992-12/31/1994	FY94: \$105,000	TOTAL: \$385,171
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P C CORMILLON	HQ/D ADAMEC	33-Oceanography
	HQ/R A SCHIFFER	

NAGW 3020 University of Rhode Island 7321
COMPARISON BETWEEN CZCS-MEASURED AEROSOL RADIANCE AND MARINE BOUNDARY LAYER MINERAL AEROSOL CONC.

Period	Obligations	
03/30/1992-11/30/1993	FY94: \$0	TOTAL: \$95,681
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N W TINDALE	HQ/J A KAYE	31-Atmos Sci
	HQ/R E MURPHY	

NAGW 3133 University of Rhode Island 7322
DEVELOPMENT AND EVALUATION OF CLOUD SCREENING ALGORITHMS

Period	Obligations	
07/14/1992-08/31/1993	FY94: \$0	TOTAL: \$35,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P C CORNILLION	HQ/D ADAMEC	33-Oceanography
	HQ/R A SCHIFFER	

NAGW 3496 University of Rhode Island 7323
NAGW-3496/UNIV RHODE ISLAND/BOLIDE IMPACT ON EVAPORITE TERRANE

Period	Obligations	
03/27/1993-12/31/1994	FY94: \$43,195	TOTAL: \$88,197
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H SUGURDSSON	HQ/J BOYCE	32-Geological Sci

NAGW 3601 University of Rhode Island 7324
REMOTE SENSING OF MINERAL AEROSOLS AND THEIR IMPACT ON PHYTOPLANKTON PRODUCTION

Period	Obligations	
05/21/1993-04/30/1995	FY94: \$66,213	TOTAL: \$91,213
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P STEGMAN	HQ/R E MURPHY	33-Oceanography
N TINDALE		

NAGW 3645 University of Rhode Island 7325
1993 RESEARCH CONFERENCE ON CHRONOBIOLOGY

Period	Obligations	
08/03/1993-05/31/1994	FY94: \$0	TOTAL: \$6,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A CRUICKSHANK	HQ/J H STOKLOSA	51-Biological Sci

NAGW 3784 University of Rhode Island 7326
WORKSHOP SERIES ON DISTRIBUTED DATA SYSTEMS FOR OCEANOGRAPHY

Period	Obligations	
09/29/1993-06/30/1994	FY94: \$75,000	TOTAL: \$75,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P C CORNILLON	HQ/D ADAMEC	33-Oceanography
	HQ/R A SCHIFFER	

NAGW 3890 University of Rhode Island 7327
UNIV RHODE ISLAND; DISTRIBUTED OCEANOGRAPHIC DATA SYSTEM DEVELOPMENT: CLIENT SERVER DATA LOCATION

Period	Obligations	
03/09/1994-03/31/1995	FY94: \$84,849	TOTAL: \$84,849
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P CORNILLION	HQ/G H MUCKLOW	22-Computer Science
	HQ/J H BREDECAMP	

**NASA'S UNIVERSITY PROGRAM
RHODE ISLAND (Continued)**

NAGW 4045 University of Rhode Island 7328
1993 ORIGINS OF LIFE CONFERENCE
Period *Obligations*
06/22/1994-05/30/1995 FY94: \$23,400 TOTAL: \$23,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D DES MARAIS HQ/M MEYER 51-Biological Sci

NAGW 4099 University of Rhode Island 7329
1994 GORDON RESEARCH CONFERENCE ON CRYSTAL GROWTH
Period *Obligations*
08/09/1994-05/31/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I D ALEXANDER HQ/D LONGEDDY 13-Physics

SOUTH CAROLINA

NAG 8-259 Benedict College 7330
JOVE
Period *Obligations*
02/10/1993-07/31/1995 FY94: \$19,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L LOWE MSFC/F SIX 56-Medical Sciences

NAG 5-1551 Citadel Military College of S C 7331
PHOTOGRAPHIC REGION ELEMENTAL ABUNDANCE ANALYSIS O F
HST/GTO STARS, II
Period *Obligations*
04/26/1991-07/31/1994 FY94: \$0 TOTAL: \$25,980
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S J ADELMAN GSFC/D S LECKRONE 11-Astronomy

NAG 5-2472 Citadel Military College of S C 7332
ELEMENTAL ABUNDANCES OF MERCURY MANGANESE STARS
Period *Obligations*
01/04/1994-01/31/1995 FY94: \$7,500 TOTAL: \$7,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S ADELMAN GSFC/D WEST 11-Astronomy

NAGW 3225 Citadel Military College of S C 7333
NAGW-3225/CITADEL MILITARY COLLEGE SC/ASTRONOMY IN THE
ELEMENTARY CLASSROOM
Period *Obligations*
11/02/1992-07/31/1993 FY94: \$0 TOTAL: \$4,973
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S J ADELMAN HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAG 1-928 Clemson University - Clemson 7334
WINDSHEAR DETECTION RADAR SIGNAL PROCESSING STUDIE S
Period *Obligations*
11/18/1988-08/31/1993 FY94: TOTAL: \$312,723
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E G BAXA LARC/A I MACKENZIE 45-Elec Engr
LARC/L D STATON

NAG 1-1108 Clemson University - Clemson 7335
DEVELOPMENT OF HIGH TE (110K) BI, T1 AND Y-BASED MATERIALS
AS SUPERCONDUCTING CIRCUIT ELEMENTS
Period *Obligations*
02/28/1990-08/20/1994 FY94: TOTAL: \$170,788
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G H HAERTLING LARC/S A WISE 47-Materials Engr
B I LEE/W C KELLIHER

NAG 1-1141 Clemson University - Clemson 7336
STIFFNESS TAILORING OF COMPOSITE PLATES FOR IMPROV ED
STABILITY AND STRENGTH UNDER COMBINED LOADING.
Period *Obligations*
05/28/1990-01/31/1995 FY94: \$59,970 TOTAL: \$307,036
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S B BIGGERS LARC/M J SHUART 41-Aero Engr
LARC/D R AMBUR

NAG 1-1301 Clemson University - Clemson 7337
SUPERCONDUCTIVITY DEVICES: COMMERCIAL USE FOR SPACE
Period *Obligations*
07/03/1991-01/31/1995 FY94: \$60,000 TOTAL: \$225,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G H HAERTLING LARC/W E MILLER 47-Materials Engr

NAG 1-1634 Clemson University - Clemson 7338
LASER RADAR SENSOR DEVELOPMENT SIGNAL PROCESSING
STUDIES
Period *Obligations*
06/30/1994-03/15/1995 FY94: \$59,895 TOTAL: \$59,895
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E G BAXA LARC/L D STATON 45-Elec Engr

NAG 3-1311 Clemson University - Clemson 7339
NEUROCONTROL
Period *Obligations*
12/12/1991-11/21/1994 FY94: \$67,070 TOTAL: \$151,719
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J K PETERSON LERC/J A PENNLIN 21-Mathematics

NAG 5-632 Clemson University - Clemson 7340
EXPERIMENTAL AND THEONETICAL INVESTIGATIONS OF HIGH
LATITUDE THERMOSPHERIC DYNAMICS
Period *Obligations*
12/31/1985-11/30/1994 FY94: \$20,000 TOTAL: \$729,203
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M F LARSEN GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-1578 Clemson University - Clemson 7341
THE DIFFUSE GALACTIC GLOW
Period *Obligations*
05/01/1991-03/14/1995 FY94: \$23,000 TOTAL: \$163,991
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H HARTMANN GSFC/J P NORRIS 11-Astronomy
GSFC/D A KNIFFEN

NAG 5-2419 Clemson University - Clemson 7342
SOLAR MAXIMUM MISSION OBSERVATIONS OF GAMMA-RAY TR
ANSIENTS AND THE DIFFUSE GAMMA
Period *Obligations*
11/06/1993-11/14/1994 FY94: \$41,700 TOTAL: \$41,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M LEISING GSFC/D WEST 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
SOUTH CAROLINA (Continued)**

NAG 5-5002		Clemson University - Clemson	7343
COORDINATED STUDIES OF MAGNETOSPHERIC/IONOSPHERIC COUPLING AND DYNAMICS DIFFUSE AURORA			
<i>Period</i>	<i>Obligations</i>		
04/16/1993-11/30/1994	FY94: \$183,000	TOTAL: \$316,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M F LARSON	GSFC/L J EARLY	13-Physics	
	GSFC/R H PLESS		
NAG 9-414		Clemson University - Clemson	7344
ORIGIN OF THE SOLAR SYSTEM ISOTOPIC ANOMOLIES AND CHEMICAL MEMORY			
<i>Period</i>	<i>Obligations</i>		
02/05/1990-03/01/1994	FY94: \$0	TOTAL: \$119,915	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D D CLAYTON	JSC/I D BROWNE	19-Phys Sci, NEC	
NAGW 2305		Clemson University - Clemson	7345
NUCLEAR CLUES TO SOLAR SYSTEM ORIGINS			
<i>Period</i>	<i>Obligations</i>		
12/06/1990-10/31/1994	FY94: \$24,998	TOTAL: \$124,694	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D D CLAYTON	HQ/J A NUTH	19-Phys Sci, NEC	
NAGW 2769		Clemson University - Clemson	7346
ANALYSIS OF GAMMA RAY LINE INTENSITIES FROM THE EARTH'S ATMOSPHERE			
<i>Period</i>	<i>Obligations</i>		
11/08/1991-10/31/1992	FY94: \$0	TOTAL: \$30,930	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J R LETAW	HQ/W J WAGNER	13-Physics	
	HQ/K LANG		
NAGW 3277		Clemson University - Clemson	7347
NAGW-3277/CLEMSON UNIV/ISOTOPIC ANOMALIES AND CHEMICAL MEMORY			
<i>Period</i>	<i>Obligations</i>		
12/04/1992-11/30/1995	FY94: \$46,428	TOTAL: \$89,031	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D D CLAYTON	HQ/H C BRINTON	32-Geological Sci	
NAGW 3480		Clemson University - Clemson	7348
THE HISTORY OF THE NUCLEI COMPRISING PLANETARY MATERIALS			
<i>Period</i>	<i>Obligations</i>		
03/27/1992-01/31/1995	FY94: \$33,091	TOTAL: \$65,689	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B MEYER	HQ/J BOYCE	32-Geological Sci	
NAS 5-31750		Clemson University - Clemson	7349
PROTOFLIGHT MICRODOSIMETER			
<i>Period</i>	<i>Obligations</i>		
07/01/1992-07/01/1993	FY94: \$0	TOTAL: \$96,056	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P J MCNULTY	GSFC/E G STASSINOPOULOS	31-Atmos Sci	
NAS 5-32462		Clemson University - Clemson	7350
TO CONTINUE STUDY AND DEVELOPMENT OF TRANSPORTABLE TELEMETRY WORKSTATION			
<i>Period</i>	<i>Obligations</i>		
02/25/1993-12/31/1994	FY94: \$70,000	TOTAL: \$169,262	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A S COLLINS	GSFC/T BENNETT	45-Elec Engr	
NAS 8-37851		Clemson University - Clemson	7351
NONLINEAR WAVE-PLASMA INTERACTION STUDY			
<i>Period</i>	<i>Obligations</i>		
09/16/1988-05/31/1993	FY94: \$0	TOTAL: \$407,540	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L M DUNCAN	MSFC/J F STONE	13-Physics	
NCC 1-127		Clemson University - Clemson	7352
MECHANICAL EVALUATION OF THROUGH-THE-THICKNESS REINFORCED COMPOSITE MATERIALS			
<i>Period</i>	<i>Obligations</i>		
07/15/1988-06/30/1994	FY94: \$0	TOTAL: \$84,930	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J M KENNEDY	LARC/G L FARLEY	47-Materials Engr	
	LARC/H B DEXTER		
NCC 1-182		Clemson University - Clemson	7353
FACTORS AFFECTING INTERFACIAL BOND DEVELOPMENT BY INDUCTION HEATING NLPN 93-508			
<i>Period</i>	<i>Obligations</i>		
07/21/1993-07/20/1994	FY94: \$0	TOTAL: \$6,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S W SHALSBY	LARC/F H FARMER	56-Medical Sciences	
R JAMISON			
NGT 00-010-008		Clemson University - Clemson	7354
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
10/07/1993-03/31/1994	FY94: \$50,000	TOTAL: \$50,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G M FADEL	HQ/G S SEIDEL	41-Aero Engr	
	HQ/J R FACEY		
NGT 00-050-419		Clemson University - Clemson	7355
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/16/1989-06/30/1995	FY94: \$22,000	TOTAL: \$128,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W B LIGON	HQ/F C OWENS	22-Computer Science	
NGT 00-050-715		Clemson University - Clemson	7356
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/30/1991-08/15/1993	FY94: \$0	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J G GOREE	HQ/F C OWENS	46-Mech Engr	
NGT 00-050-975		Clemson University - Clemson	7357
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/18/1992-08/19/1994	FY94: \$11,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E G BAXA	LARC/E PRIOR	45-Elec Engr	
NGT 00-051-195		Clemson University - Clemson	7358
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/29/1993-08/23/1996	FY94: \$44,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D DINGER	LARC/E PRIOR	49-Engr, NEC	

NASA'S UNIVERSITY PROGRAM **SOUTH CAROLINA (Continued)**

NGT 00-070-386 Clemson University - Clemson 7359			
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/26/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J PETERSON	HQ/D RUSSELL	21-Mathematics	
NGT 00-090-109 Clemson University - Clemson 7360			
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/17/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S J LASSER	HQ/D K RUSSELL	99-Multi-Discip	
NGT 00-090-110 Clemson University - Clemson 7361			
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/17/1992-08/14/1993	FY94: \$0	TOTAL: \$12,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S J LASSER	HQ/D K RUSSELL	99-Multi-Discip	
NGT 00-090-192 Clemson University - Clemson 7362			
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/25/1993-08/14/1995	FY94: \$12,000	TOTAL: \$24,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S LASSER	HQ/D RUSSELL	99-Multi-Discip	
NGT 00-090-193 Clemson University - Clemson 7363			
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/27/1993-08/14/1995	FY94: \$12,000	TOTAL: \$24,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S LASSER	HQ/D K RUSSELL	99-Multi-Discip	
NGT 00-090-194 Clemson University - Clemson 7364			
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/27/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S LASSER	HQ/D RUSSELL	99-Multi-Discip	
NGT 00-090-220 Clemson University - Clemson 7365			
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/23/1993-08/14/1995	FY94: \$12,000	TOTAL: \$24,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S LASSER	HQ/D RUSSELL	99-Multi-Discip	
NAG 5-1634 College of Charleston 7366			
A NASA/UNIVERSITY JOINT VENTURE IN SPACE SCIENCE (JOVE)			
<i>Period</i>	<i>Obligations</i>		
06/14/1991-07/14/1994	FY94: \$22,000	TOTAL: \$121,600	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M W COLGAN	GSFC/G A SOFFEN	32-Geological Sci	
P DUSTAN	GSFC/P J SAKIMOTO		
NGT 00-040-055 College of Charleston 7367			
SOUTH CAROLINA SPACE GRANT CONSORTIUM			
<i>Period</i>	<i>Obligations</i>		
08/13/1993-05/31/1995	FY94: \$170,000	TOTAL: \$343,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M W COLGAN	HQ/E T SCHWARTZ	99-Multi-Discip	
NAG 1-1489 University of South Carolina 7368			
CHARACTERIZATION OF CRACK GROWTH IN ALUMINUM SHEETS SUBJECTED TO MULTIMODE LOADING NLPN 93-105			
<i>Period</i>	<i>Obligations</i>		
02/19/1993-11/30/1994	FY94: \$114,770	TOTAL: \$181,800	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M SUTTON	LARC/C E HARRIS	47-Materials Engr	
W CHAO			
NAGW 2510 University of South Carolina 7369			
NAGW-2510/UNIV SOUTH CAROLINA/3-D UV DETECTORS BASED ON ENERGY SENSITIVE SUPERCONDUCTING ELEMENTS			
<i>Period</i>	<i>Obligations</i>		
05/09/1991-08/31/1994	FY94: \$0	TOTAL: \$309,987	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A K DRUKER	HQ/R STACHNIK	11-Astronomy	
NAGW 3169 University of South Carolina 7370			
MULTISENSOR ANALYSIS OF THE ENVIRONMENTAL SENSITIVITY OF OIL IMPACTED			
<i>Period</i>	<i>Obligations</i>		
08/28/1992-08/31/1994	FY94: \$54,320	TOTAL: \$107,390	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J JENSEN	HQ/M R HELFERT	39-Env Sci, NEC	
J MICHEL	HQ/D M BUTLER		
NAGW 3637 University of South Carolina 7371			
BASALTIC VOLCANISM AND ANCIENT PLANETARY CRUSTS			
<i>Period</i>	<i>Obligations</i>		
06/04/1993-05/31/1995	FY94: \$20,129	TOTAL: \$40,120	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J SHERVAIS	HQ/J BOYCE	32-Geological Sci	
NAG13-27 University of South Carolina 7372			
A NASA VISITING INVESTIGATOR PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/02/1993-09/30/1995	FY94: \$68,237	TOTAL: \$118,237	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J R JENSEN	SSC/C	39-Env Sci, NEC	
D C COWEN			
NAS13-449 University of South Carolina 7373			
IMPROVED URBAN INFRASTRUCTURE MAPPING USING REMOTE SENSING AND GIS TECHNOLOGY			
<i>Period</i>	<i>Obligations</i>		
07/10/1991-07/09/1994	FY94: \$0	TOTAL: \$226,224	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D J COWEN	SSC/C L HILL	72-Economics	
J R JENSEN	SSC/B DAVIS		
NGT 00-051-315 University of South Carolina 7374			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/29/1994-08/31/1997	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J R ROSE	HQ/J T LYNCH	22-Computer Science	
NGT 00-090-145 University of South Carolina 7375			
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/26/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M SUTTON	HQ/D K RUSSELL	99-Multi-Discip	

NASA'S UNIVERSITY PROGRAM SOUTH DAKOTA

SOUTH DAKOTA

NAG 1-542 South Dakota School of Mines & Tech 7376
MODELING AND PARAMETERIZATION OF HORIZONTALLY
INHOMOGENEOUS CLOUD RADIATIVE PROP.
Period Obligations
12/07/1984-05/15/1995 FY94: \$78,800 TOTAL: \$615,388
Prin. Invest NASA Tech. Officer CASE Category
S K SENGUPTA LARC/B A WIELICKI 31-Atmos Sci

NAG 5-386 South Dakota School of Mines & Tech 7377
RAIN VOLUME ESTIMATION OVER AREAS USING SATELLITE AND
RADAR DATA
Period Obligations
01/01/1984-04/30/1995 FY94: \$60,000 TOTAL: \$633,327
Prin. Invest NASA Tech. Officer CASE Category
P SMITH GSFC/R F ADLER 31-Atmos Sci
T H VONDER HAAR

NAG 5-2711 South Dakota School of Mines & Tech 7378
EFFECTS OF SUBSONIC AIRCRAFT ON AEROSOLS AND
CLOUDINESS IN THE UPPER TROPOSPHERE, ETC...
Period Obligations
09/01/1994-08/31/1995 FY94: \$4,000 TOTAL: \$4,000
Prin. Invest NASA Tech. Officer CASE Category
A G DETWILER GSFC/R W STEWART 31-Atmos Sci

NAG 5-2712 South Dakota School of Mines & Tech 7379
RADIATIVE EFFECTS OF SUBSONIC JET CONTRAILS
Period Obligations
09/01/1994-08/31/1995 FY94: \$3,186 TOTAL: \$3,186
Prin. Invest NASA Tech. Officer CASE Category
R M WELCH GSFC/R W STEWART 31-Atmos Sci

NAGW 3740 South Dakota School of Mines & Tech 7380
IMPACT OF AEROSOLS GENERATED FROM BIOMASS BURNING,
DUST STORMS, AND VOLCANOES
Period Obligations
09/22/1993-02/28/1995 FY94: \$75,650 TOTAL: \$112,050
Prin. Invest NASA Tech. Officer CASE Category
R M WELCH HQ/J T SUTTLES 31-Atmos Sci
HQ/A C JANETOS

NAGW 3788 South Dakota School of Mines & Tech 7381
GLOBAL AND REGIONAL AEROSOLS AND THEIR EFFECTS ON
CLOUD PROPERTIES
Period Obligations
10/05/1993-09/30/1996 FY94: \$64,900 TOTAL: \$64,900
Prin. Invest NASA Tech. Officer CASE Category
Q Y HAN HQ/J C DODGE 31-Atmos Sci

NAGW 3922 South Dakota School of Mines & Tech 7382
GLOBAL RETRIEVAL OF CLOUD PARTICLE SIZE AND OPTICAL
THICKNESS USING ISCCP DATA
Period Obligations
04/05/1994-03/31/1997 FY94: \$64,000 TOTAL: \$64,000
Prin. Invest NASA Tech. Officer CASE Category
R M WELCH HQ/J C DODGE 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 3966 South Dakota School of Mines & Tech 7383
NAGW-3966/B SOUTH DAKOTA SCH. OF MINES AND TECH. 'E RBE
AND SAGE-II INVEST. OF CLOUD RADIATIVE...'
Period Obligations
05/13/1994-04/30/1995 FY94: \$93,300 TOTAL: \$93,300
Prin. Invest NASA Tech. Officer CASE Category
R M WELSH HQ/J C DODGE 31-Atmos Sci

NAS 1-19077 South Dakota School of Mines & Tech 7384
SCIENCE INVESTIGATIONS IN SUPPORT OF CLOUDS AND TH E
EARTH'S RADIANT ENERGY SYSTEM (CERES)
Period Obligations
12/12/1989-12/12/1999 FY94: \$216,000 TOTAL: \$710,299
Prin. Invest NASA Tech. Officer CASE Category
R M WELCH LARC/B A WIELICKI 19-Phys Sci, NEC
LARC/J W YOUNGBLOOD

NAS 5-31718 South Dakota School of Mines & Tech 7385
EOS ASTER/HIRIS INVESTIGATION
Period Obligations
01/09/1992-12/14/2001 FY94: \$267,000 TOTAL: \$772,000
Prin. Invest NASA Tech. Officer CASE Category
R WELCH GSFC/T BRAKE 39-Env Sci, NEC

NCA 5-115 South Dakota School of Mines & Tech 7386
SCIENTIFIC KNOWLEDGE FOR INDIAN LEARNING AND LEADERSHIP
(SKILL) SUMMER PROGRAM
Period Obligations
01/20/1993-01/31/1995 FY94: \$53,000 TOTAL: \$106,000
Prin. Invest NASA Tech. Officer CASE Category
S C MCCULLOH GSFC/P J SAKIMOTO 31-Atmos Sci
P SMITH GSFC/T R GULL
D J ANDERSON

NCC 9-24 South Dakota School of Mines & Tech 7387
ELECTRONIC EXTENSION SERVICES
Period Obligations
05/18/1994-04/30/1997 FY94: \$1,344,412 TOTAL: \$1,344,412
Prin. Invest NASA Tech. Officer CASE Category
T S ARNESON JSC/C WOOLLEY 49-Engr, NEC

NGT 00-030-142 South Dakota School of Mines & Tech 7388
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/01/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
S A CHRISTOPHER HQ/G ASRAR 99-Multi-Discip
HQ/D M BUTLER

NGT 00-040-046 South Dakota School of Mines & Tech 7389
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRA M
Period Obligations
03/14/1991-02/28/1995 FY94: \$170,500 TOTAL: \$663,500
Prin. Invest NASA Tech. Officer CASE Category
P L SMITH HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-090-139 South Dakota School of Mines & Tech 7390
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/26/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest NASA Tech. Officer CASE Category
F CAMPONE HQ/D K RUSSELL 99-Multi-Discip

**NASA'S UNIVERSITY PROGRAM
SOUTH DAKOTA (Continued)**

NAG 8-258 **South Dakota State University** **7391**
JOVE
Period *Obligations*
11/30/1992-05/31/1995 FY94: \$39,183 TOTAL: \$102,176
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S SCHILLER MSFC/F SIX 99-Multi-Discip
M ROSE
D HELDER

NAG 2-492 **University of South Dakota** **7392**
THE HUMAN-COMPUTER INTERFACE IN THE MODERN
MISSIONCONTROL CENTER
Period *Obligations*
03/01/1988-08/15/1994 FY94: \$30,829 TOTAL: \$170,594
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M M GRANAAS ARC/J M SKULTETY 41-Aero Engr
ARC/D L WHEATON

TENNESSEE

NAG 8-1024 **Christian Brothers College** **7393**
TEST DATA INTERGRATION PRECEDURE FOR GENERAL ROCKET
ENGINE PERFORMANCE MODELS
Period *Obligations*
02/09/1994-02/08/1995 FY94: \$39,756 TOTAL: \$39,756
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L N SANTI MSFC/J P BUTAS 41-Aero Engr
MSFC/D C SEYMOUR

NAG 5-2130 **East Tennessee State University** **7394**
THE CIRCUMSTELLAR MATERIAL OF SOCKET STARS
Period *Obligations*
11/09/1992-11/14/1993 FY94: \$0 TOTAL: \$6,478
Prin. Invest. *NASA Tech. Officer* *CASE Category*
GSFC/D WEST 11-Astronomy

NAG 3-1430 **Fisk University** **7395**
EXPERIMENTAL STUDIES ON SURFACE-GAS PLUME INTERACT
IONS
Period *Obligations*
01/06/1993-02/10/1995 FY94: \$305,032 TOTAL: \$604,886
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E COLLINS LERC/S R BULLOCK 13-Physics
M A GEORGE LERC/F M CURRAN

NAG 8-218 **Fisk University** **7396**
JOVE
Period *Obligations*
01/09/1992-05/11/1994 FY94: \$0 TOTAL: \$55,267
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MCGRUDER MSFC/F SIX 11-Astronomy

NAG 8-1066 **Fisk University** **7397**
METAL AND SEMICONDUCTOR NANOCRYSTALS
Period *Obligations*
07/11/1994-07/31/1995 FY94: \$83,070 TOTAL: \$83,070
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D O HENDERSON MSFC/J DOWNEY 47-Materials Engr
R MU

NAGW 2925 **Fisk University** **7398**
CENTER FOR PHOTONIC MATERIALS AND DEVICES
Period *Obligations*
02/28/1992-12/31/1994 FY94: \$672,606 TOTAL: \$1,713,242
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E SILBERMAN HQ/S E MASSENBERG 13-Physics
HQ/S HARTMAN

NAGW 3930 **Lane College** **7399**
NAGW-3930/LANE COLLEGE/IMPROVED EDUCATION OF
DISADVANTAGED AND MINORITY STUDENTS
Period *Obligations*
05/26/1994-04/30/1995 FY94: \$197,200 TOTAL: \$197,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W C MCCLURE HQ/W L HARRIS 21-Mathematics
HQ/P F RICHARDSON

NGT 00-070-388 **Meharry Medical College** **7400**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/12/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S E ADUNYAH HQ/D K RUSSELL 56-Medical Sciences

NAG 3-961 **Memphis State University** **7401**
EFFECTS OF TOOTH PROFILE MODIFICATIONS
Period *Obligations*
12/15/1988-11/30/1994 FY94: \$55,000 TOTAL: \$318,088
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H H LIN LERC/F B OSWALD 46-Mech Engr
LERC/J J ZAKRAJSEK

NAG 3-1292 **Memphis State University** **7402**
MULTI-DIMENSIONAL MODELING OF PRESSURIZATION AND EXP
ULSION OF MULTI-PHASE HYDROGEN PROPELLANT
Period *Obligations*
07/16/1991-07/08/1993 FY94: \$0 TOTAL: \$39,925
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J I HOCHSTEIN LERC/T L HARDY 46-Mech Engr

NAG 3-1530 **Memphis State University** **7403**
MODELING OF ROCKET ENGINE DYNAMIC PERFORMANCE
Period *Obligations*
09/27/1993-09/26/1994 FY94: \$0 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J I HOCHSTEIN LERC/T L HARDY 46-Mech Engr

NAG 8-211 **Memphis State University** **7404**
FEASIBILITY STUDY OF ADAPTIVE GRID GENERATION IN LUNS
CODE
Period *Obligations*
10/02/1991-09/30/1993 FY94: \$0 TOTAL: \$9,998
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D MO MSFC/A S CHOW 49-Engr, NEC

NAGW 3338 **Memphis State University** **7405**
TECTONICS AND TOPOGRAPHY
Period *Obligations*
01/13/1993-04/30/1995 FY94: \$12,056 TOTAL: \$43,177
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M A ELLIS HQ/M BALTUCK 32-Geological Sci

NASA'S UNIVERSITY PROGRAM **TENNESSEE (Continued)**

NGT 00-070-369	Memphis State University		7406
	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	11/24/1993-08/14/1996	FY94: \$44,000	TOTAL: \$44,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M GARZON		HQ/D K RUSSELL	22-Computer Science
NAGW 3170	Middle Tennessee State University		7407
	A CRI TRAINING COURSE IN REMOTE SENSING		
	<i>Period</i>	<i>Obligations</i>	
	08/18/1992-08/31/1993	FY94:	TOTAL: \$48,890
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
O'FARRELL		HQ/M R HELFERT	39-Env Sci, NEC
R ZAWISLAK		HQ/D M BUTLER	
NAG 3-1171	Tennessee State University		7408
	TSU RESEARCH PROJECT FOR INCREASING THE POOL OF MINORITY ENGINEERS		
	<i>Period</i>	<i>Obligations</i>	
	05/07/1990-07/14/1994	FY94:	TOTAL: \$259,370
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D B ROGERS		LERC/R F LAWRENCE	41-Aero Engr
		LERC/R L BONDURANT	
NAG 3-1471	Tennessee State University		7409
	ROBUST INTEGRATED NEURO CONTROLLER FOR COMPLEX DYNAMIC SYSTEMS		
	<i>Period</i>	<i>Obligations</i>	
	05/31/1993-05/05/1995	FY94: \$150,008	TOTAL: \$341,844
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M S ZEIN-SABATTO		LERC/T GUO	41-Aero Engr
MARPAKA			
M MALKANI			
NAG 3-1479	Tennessee State University		7410
	A STUDY OF RELATIONSHIP BETWEEN PROBABILISTIC DESIGN AND AXIOMETRIC DESIGN METHODOLOGY		
	<i>Period</i>	<i>Obligations</i>	
	05/14/1993-05/30/1995	FY94: \$397,791	TOTAL: \$798,493
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C ONWVBIXO		LERC/L BERKE	49-Engr, NEC
F MISHU		LERC/D HOPKINS	
F C CHEN			
NAG 3-1647	Tennessee State University		7411
	INCREASING THE POOL OF MINORITY ENGINEERS		
	<i>Period</i>	<i>Obligations</i>	
	07/01/1994-10/31/1994	FY94: \$73,160	TOTAL: \$73,160
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D B ROGERS		LERC/J E BOYD	49-Engr, NEC
NAG 5-1474	Tennessee State University		7412
	1. CHROMOSPHERIC STRUCTURE AND HEATING IN SEMIREGULAR VARIABLES 2. MAPPING THE CHROMOSPHERE OF		
	<i>Period</i>	<i>Obligations</i>	
	10/16/1990-01/31/1995	FY94: \$30,620	TOTAL: \$175,100
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A EATON		GSFC/D WEST	11-Astronomy
NAG 5-2109	Tennessee State University		7413
	PARAMETRIC ROBUST CONTROL AND SYSTEM IDENTIFICATION: A UNIFIED APPROACH		
	<i>Period</i>	<i>Obligations</i>	
	09/28/1992-09/30/1994	FY94: \$110,877	TOTAL: \$200,210
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L KEEL		GSFC/H P FRISCH	42-Astro Engr
NAG 5-2464	Tennessee State University		7414
	THE RELATIONSHIP OF METALLICITY AND ACTIVITY		
	<i>Period</i>	<i>Obligations</i>	
	01/06/1994-01/14/1995	FY94: \$1,500	TOTAL: \$1,500
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F C FEKEL		GSFC/D WEST	11-Astronomy
NAG 5-2682	Tennessee State University		7415
	WINDS IN NON-ECLIPSING ZETA AURIGAE BINARIES		
	<i>Period</i>	<i>Obligations</i>	
	08/15/1994-08/14/1995	FY94: \$20,000	TOTAL: \$20,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J A EATON		GSFC/D WEST	11-Astronomy
NAG 8-111	Tennessee State University		7416
	PHOTOMETRIC AND SPECTROSCOPIC STUDY OF CHROMOSPHERICALLY ACTIVE STARS		
	<i>Period</i>	<i>Obligations</i>	
	06/09/1988-07/13/1994	FY94: \$0	TOTAL: \$544,282
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M R BUSBY		MSFC/J L RANDALL	11-Astronomy
		MSFC/R J WALKER	
NAG 8-1014	Tennessee State University		7417
	SUN OBSERVATIONS		
	<i>Period</i>	<i>Obligations</i>	
	11/19/1993-11/18/1994	FY94: \$118,143	TOTAL: \$118,143
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G HENRY		MSFC/J M DAVIS	11-Astronomy
J EATON			
M BUSBY			
NAG 8-1018	Tennessee State University		7418
	RESEARCH ON THE MECHANICAL PROPERTIES OF ION BEAM DEPOSITS		
	<i>Period</i>	<i>Obligations</i>	
	03/04/1994-03/04/1995	FY94: \$155,012	TOTAL: \$155,012
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D K CHAUDHUN		MSFC/F E ROBERTS	47-Materials Engr
		MSFC/R J WALKER	
NAG 9-455	Tennessee State University		7419
	TESTING SPACE RADIATION ENVIRONMENT		
	<i>Period</i>	<i>Obligations</i>	
	06/29/1990-08/31/1993	FY94: \$0	TOTAL: \$119,750
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M AWIPI		JSC/E M EMMANUEL	31-Atmos Sci
NGT 00-090-127	Tennessee State University		7420
	UNDERGRADUATE STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	09/24/1992-08/14/1995	FY94: \$12,000	TOTAL: \$36,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S DEVGAN		HQ/D K RUSSELL	99-Multi-Discip
NAG 8-206	Tennessee Technological University		7421
	INVESTIGATION OF COLLISIONAL BROADENING MECHANISMS FOR ATOMIC SPECIES ON COMBUSTED H2/O2		
	<i>Period</i>	<i>Obligations</i>	
	07/22/1991-01/22/1995	FY94: \$20,000	TOTAL: \$59,852
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D C VENTRICE		MSFC/W T POWERS	11-Astronomy
V P FORTNER			

NASA'S UNIVERSITY PROGRAM **TENNESSEE (Continued)**

NAG 9-710 Tennessee Technological University 7422
DESIGN OF SYNTHETIC ESTIMATION FILTERS
Period Obligations
08/30/1993-11/01/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest NASA Tech. Officer CASE Category
P K BAJAN JSC/R JUDAY 22-Computer Science

NGT 00-050-731 Tennessee Technological University 7423
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/30/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest NASA Tech. Officer CASE Category
S HAN HQ/F C OWENS 46-Mech Engr

NAG 1-1008 University of Tennessee - Knoxville 7424
ROBOTIC CONTROL OF NASA LABORATORY TELEROBOTIC MANIPULATOR
Period Obligations
06/16/1989-12/31/1994 FY94: \$0 TOTAL: \$188,824
Prin. Invest NASA Tech. Officer CASE Category
R V DUBEY LARC/W W HANKINS 46-Mech Engr
LARC/L K BARKER

NAG 1-1368 University of Tennessee - Knoxville 7425
AERODYNAMIC/ACOUSTIC COMPUTATION OF HELICOPTER ROTORS INCLUDING BLADE/VORTEX IMPINGEMENT
Period Obligations
12/12/1991-12/09/1994 FY94: \$47,001 TOTAL: \$169,335
Prin. Invest NASA Tech. Officer CASE Category
J S STEINHOFF LARC/C L BURLEY 41-Aero Engr
LARC/T F BROOKS

NAG 1-1566 University of Tennessee - Knoxville 7426
EFFECT OF FIBER-MATRIX INTERFACE ON THE THERMO- OXIDATIVE STABILITY OF IM7/5260 COMPOSITES
Period Obligations
01/14/1994-10/10/1994 FY94: \$55,587 TOTAL: \$55,587
Prin. Invest NASA Tech. Officer CASE Category
M S MADHUKAR LARC/W S JOHNSON 47-Materials Engr
LARC/C E HARRIS

NAG 1-1612 University of Tennessee - Knoxville 7427
LARGE-VORTEX CAPTURE BY A WING AT VERY HIGH ANGLES OF ATTACK
Period Obligations
04/19/1994-04/12/1995 FY94: \$71,300 TOTAL: \$71,300
Prin. Invest NASA Tech. Officer CASE Category
J M WU LARC/R D JOSLIN 41-Aero Engr
J Z WU

NAG 2-881 University of Tennessee - Knoxville 7428
SUPERSONIC LAMINAR FLOW CONTROL RESEARCH
Period Obligations
01/24/1994-12/31/1994 FY94: \$30,829 TOTAL: \$30,829
Prin. Invest NASA Tech. Officer CASE Category
C F LO ARC/L S KING 41-Aero Engr

NAG 3-876 University of Tennessee - Knoxville 7429
CONTAINERLESS GROWTH
Period Obligations
03/15/1988-02/27/1995 FY94: \$30,000 TOTAL: \$257,000
Prin. Invest NASA Tech. Officer CASE Category
B F OLIVER LERC/M V NATHAL 47-Materials Engr
C R BROOKS
D BRUNS

NAG 3-1480 University of Tennessee - Knoxville 7430
EFF OF THERM OXID AND SURF MOD OF CARBON FIBER ON TH E MECH AND FRACT BEHAV OF CARB FIB/PMR-15 COMPOSITE
Period Obligations
05/03/1993-07/23/1993 FY94: \$0 TOTAL: \$6,875
Prin. Invest NASA Tech. Officer CASE Category
M S MADHUKAR LERC/K J BOWLES 47-Materials Engr

NAG 3-1516 University of Tennessee - Knoxville 7431
DEVELOPMENT OF A METHOD FOR FAST NUMERICAL SOLUTION OF HELMHOLTZ ATYPE PROBLEMS
Period Obligations
07/22/1993-11/14/1994 FY94: \$87,307 TOTAL: \$136,667
Prin. Invest NASA Tech. Officer CASE Category
J CARUTHERS LERC/D L HUFF 41-Aero Engr

NAG 3-1573 University of Tennessee - Knoxville 7432
TOOLS FOR HETEROGENEOUS NETWORK COMPUTING PVM
Period Obligations
04/01/1994-03/31/1995 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest NASA Tech. Officer CASE Category
J DOWGARRA LERC/G J FOLLEN 22-Computer Science

NAG 8-132 University of Tennessee - Knoxville 7433
STUDY DROPLET BEHAVIOR AT SUPER CRITICAL PRESSURES
Period Obligations
09/29/1989-07/31/1994 FY94: \$0 TOTAL: \$190,222
Prin. Invest NASA Tech. Officer CASE Category
S M JENG MSFC/R H ESKRIDGE 46-Mech Engr
MSFC/F D BACHTEL

NAG 8-862 University of Tennessee - Knoxville 7434
DEVELOPMENT OF A RESEARCH CODE AND PARAMETRIC STUDY OF THE TEMPERATURE AND PRESSURE IN A CHARRIN
Period Obligations
03/11/1991-10/05/1994 FY94: \$0 TOTAL: \$224,869
Prin. Invest NASA Tech. Officer CASE Category
M KEYHANI MSFC/K E MCCOY 46-Mech Engr

NAG 8-1065 University of Tennessee - Knoxville 7435
SYNTHESIS AND CHARACTERIZATION OF SINGLE MACROMOLECULES
Period Obligations
06/28/1994-08/31/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest NASA Tech. Officer CASE Category
S D ALEXANDRATES MSFC/J P DOWNEY 47-Materials Engr
B WUNDERLICH
K D COOK

NAG 8-1089 University of Tennessee - Knoxville 7436
DEVELOPMENT OF LIQUID HANDLING TECHNIQUES IN MICROGRAVITY
Period Obligations
08/23/1994-08/22/1995 FY94: \$29,808 TOTAL: \$29,808
Prin. Invest NASA Tech. Officer CASE Category
B N ANTAR MSFC/D KORNFIELD 19-Phys Sci, NEC

NAG 9-58 University of Tennessee - Knoxville 7437
PETROLOGIC STDS METEORITE GROUPS
Period Obligations
04/01/1983-07/01/1993 FY94: TOTAL: \$467,787
Prin. Invest NASA Tech. Officer CASE Category
H Y MCSWEEN JSC/I D BROWNE 32-Geological Sci
K C MISRA

**NASA'S UNIVERSITY PROGRAM
TENNESSEE (Continued)**

NAG 9-409 University of Tennessee - Knoxville 7438				NAGW 3621 University of Tennessee - Knoxville 7446			
LUNAR SIMULANTS				METEORITE PETROGENESIS			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
01/02/1990-12/01/1994	FY94: \$0	TOTAL: \$80,869		06/17/1993-03/31/1995	FY94: \$93,991	TOTAL: \$183,506	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L A TAYLOR	JSC/D S MCKAY	32-Geological Sci		H MCSWEEN	HQ/J BOYCE	11-Astronomy	
NAG 9-415 University of Tennessee - Knoxville 7439				NAG10-138 University of Tennessee - Knoxville 7447			
CRUST/MANTLE INTERACTIONS IN PLANETARY EVOLUTION				SOMATIC ENBRYOGENESIS OF ORCHARDGRASS IN MICROGRAVITY			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
05/11/1990-02/01/1994	FY94: \$0	TOTAL: \$463,200		06/06/1994-10/06/1995	FY94: \$95,706	TOTAL: \$95,706	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L A TAYLOR	JSC/I D BROWNE	19-Phys Sci, NEC		B V CONGER	KSC/W M KNOTT	55-Agriculture Sci	
NAGW 125 University of Tennessee - Knoxville 7440				NGT 00-050-646 University of Tennessee - Knoxville 7448			
SECTROSCOPY OF METHANE FOR THE ATMOSPHERES OF THE OUTER PLANETS				NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
03/01/1981-12/31/1994	FY94: \$0	TOTAL: \$718,795		08/24/1990-10/31/1992	FY94:	TOTAL: \$43,515	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
K FOX	HQ/J T BERGSTRALH	31-Atmos Sci		S M JENG	HQ/F C OWENS	41-Aero Engr	
	HQ/W L QUAIDE						
NAGW 2015 University of Tennessee - Knoxville 7441				NGT 00-050-870 University of Tennessee - Knoxville 7449			
CONFERENCE ON LABORATORIES FOR PLANETARY ATMOSPHERE RESEARCH				NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
04/02/1990-12/31/1993	FY94: \$0	TOTAL: \$103,329		05/06/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
K FOX	HQ/J BERGSTRALH	11-Astronomy		H V MCSWEEN	JSC/S GOLDSTEIN	32-Geological Sci	
NAGW 2800 University of Tennessee - Knoxville 7442				NGT 00-050-876 University of Tennessee - Knoxville 7450			
LIGHT STABLE ISOTOPE ANALYSIS OF METEORITES BY ION MICROPROBE				NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
01/06/1992-07/31/1994	FY94: \$0	TOTAL: \$87,238		05/29/1992-07/31/1995	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H Y MCSWEEN	HQ/J K ALEXANDER	19-Phys Sci, NEC		T D MCCAY	MSFC/F SIX	41-Aero Engr	
	HQ/D A HOLLAND						
NAGW 3141 University of Tennessee - Knoxville 7443				NGT 00-050-969 University of Tennessee - Knoxville 7451			
EMBRYOGENESIS OF GRAMINEAL IN MICROGRAVITY				NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
07/24/1992-07/31/1995	FY94: \$40,000	TOTAL: \$83,000		07/24/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B V CONGER	HQ/T W HALSTEAD	51-Biological Sci		W E BLASS	GSFC/G SOFFEN	13-Physics	
NAGW 3453 University of Tennessee - Knoxville 7444				NGT 00-051-048 University of Tennessee - Knoxville 7452			
PETROGENESIS OF THE LUNAR CRUST AND MANTLE				GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
03/29/1993-01/31/1995	FY94: \$109,592	TOTAL: \$234,952		07/14/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L TAYLOR	HQ/H C BRINTON	32-Geological Sci		R J SCHULZ	LERC/F MONTEGANI	41-Aero Engr	
NAGW 3578 University of Tennessee - Knoxville 7445				NGT 00-051-052 University of Tennessee - Knoxville 7453			
REMOTE SENSING OF OCEAN COLOR IN THE HIGH ARCTIC				GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>		<i>Obligations</i>		<i>Period</i>		<i>Obligations</i>	
05/05/1993-02/28/1996	FY94: \$316,112	TOTAL: \$361,112		05/25/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G COTA	HQ/D E WICKLAND	33-Oceanography		L A TAYLOR	JSC/S GOLDSTEIN	32-Geological Sci	
	HQ/A C JANETOS						

**NASA'S UNIVERSITY PROGRAM
TENNESSEE (Continued)**

NAG 2-494 University of Tennessee - Memphis 7454
REGULATION OF ERYTHROPOIESIS IN RATS DURING SPACE FLIGHT

Period	Obligations	
01/01/1988-01/31/1995	FY94: \$290,770	TOTAL: \$1,442,421
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A T ICHIKI	ARC/W E HINDS	51-Biological Sci
Z ALLEBBAN	ARC/G A JAHNS	
L GIBSON		

NAG 1-1464 Vanderbilt University 7455
SOLAR RADIATION EFFECTS ON GLASSES

Period	Obligations	
01/29/1993-09/30/1994	FY94: \$1	TOTAL: \$74,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D L KINSER	LARC/J L JONES	47-Materials Engr
	LARC/W H KINARD	

NAG 1-1484 Vanderbilt University 7456
ADAPTIVE STRUCTURES AND DEVICES FOR SPACE APPLICATIONS

Period	Obligations	
02/22/1993-11/30/1994	FY94: \$75,000	TOTAL: \$150,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E GARCIA	LARC/G C HORNER	49-Engr, NEC

NAG 2-834 Vanderbilt University 7457
INDUCTIVE APPROACHES TO IMPROVING DIAGNOSIS AND DESIGN FOR DIAGNOSABILITY

Period	Obligations	
04/29/1993-10/31/1994	FY94: \$73,562	TOTAL: \$103,562
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D H FISHER	ARC/P E FRIEDLAND	22-Computer Science
	ARC/P LAIRD	

NAG 3-1352 Vanderbilt University 7458
MECHANICAL SYSTEM RELIABILITY FOR LONG LIFE SPACE SYSTEMS

Period	Obligations	
05/21/1992-08/31/1994	FY94: \$0	TOTAL: \$53,581
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T A CRUSE	LERC/C C CHAMIS	41-Aero Engr

NAG 3-1372 Vanderbilt University 7459
MULTI-DISCIPLINARY SYSTEM RELIABILITY

Period	Obligations	
11/03/1992-09/30/1993	FY94:	TOTAL: \$30,926
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S MAHADEVAN	LERC/C C CHAMIS	41-Aero Engr

NAG 5-1754 Vanderbilt University 7460
AN IRAS STUDY OF HERBIG AE/BE STARS AND FU ORIONIS STARS

Period	Obligations	
08/19/1991-08/31/1993	FY94: \$0	TOTAL: \$29,953
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D A WEINTRAUB	GSFC/D WEST	11-Astronomy

NAG 8-151 Vanderbilt University 7461
JOVVE PILOT RESEARCH STUDY

Period	Obligations	
03/19/1990-05/01/1995	FY94: \$8,000	TOTAL: \$100,550
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A M STRAUSS	MSFC/C R CHAPPELL	11-Astronomy
	MSFC/N F SIX	

NAG 8-156 Vanderbilt University 7462
SOLAR RADIATION EFFECTS ON GLASSES

Period	Obligations	
04/25/1990-06/17/1993	FY94:	TOTAL: \$132,591
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D L KINSER	MSFC/D S TUCKER	47-Materials Engr
	MSFC/R J HARWELL	

NAG 8-765 Vanderbilt University 7463
CONTAINERLESS PROCESSING OF REFRACTORY METALS AND ALLOYS

Period	Obligations	
03/01/1990-08/13/1994	FY94: \$0	TOTAL: \$650,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J BAYUZICK	MSFC/M B ROBINSON	47-Materials Engr

NAG 8-832 Vanderbilt University 7464
CONTAINERLESS PROCESSING OF OXIDE SUPERCONDUCTORS

Period	Obligations	
06/05/1990-08/31/1994	FY94: \$0	TOTAL: \$450,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H HOFMEISTER	MSFC/M VLASSE	13-Physics
R J BAYUZICK		

NAG 8-978 Vanderbilt University 7465
EFFECTS ON NUCLEATION BY CONTAINERLESS PROCESSING

Period	Obligations	
07/09/1993-03/31/1995	FY94: \$300,000	TOTAL: \$580,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J BAYUZICK	MSFC/R C DARTY	12-Chemistry
W H HOFMEISTER		

NAG 8-1087 Vanderbilt University 7466
STUDIES OF NUCLEATION AND GROWTH OF INTERMETALLIC COMPOUNDS

Period	Obligations	
09/15/1994-09/14/1995	FY94: \$120,000	TOTAL: \$120,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J BAYVZICK	MSFC/M B ROBINSON	47-Materials Engr
	MSFC/B SCHRICK	

NAG 9-563 Vanderbilt University 7467
THE ANEMIA OF MICROGRAVITY AND RECUMBENCY: ROLE OF SYMPATHETIC NEURAL CNTRL OF ERYTHROPOIETIN PRODUCT

Period	Obligations	
10/01/1991-10/01/1994	FY94: \$0	TOTAL: \$232,600
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D ROBERTSON	JSC/P A WHITSON	56-Medical Sciences

NAGW 1707 Vanderbilt University 7468
ENCAPSULATED LIVING CELLS AS A CURE OF HORMONE DEFICIENCY

Period	Obligations	
06/21/1989-01/31/1995	FY94: \$780,000	TOTAL: \$1,730,784
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T G WANG	HQ/R H OTT	56-Medical Sciences
	HQ/H J CLARKS	

NAGW 2030 Vanderbilt University 7469
HUMAN PERFORMANCE ENHANCEMENT AND EVALUATION IN SPACE AND LUNAR ENVIRONMENTS

Period	Obligations	
04/10/1990-09/30/1994	FY94: \$0	TOTAL: \$299,941
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A M STRAUSS	HQ/G I JOHNSTON	45-Elec Engr

**NASA'S UNIVERSITY PROGRAM
TENNESSEE (Continued)**

NAGW 2473 **Vanderbilt University** **7470**
GROUND-BASED STUDIES OF THE DYNAMICS OF CHARGED
Period *Obligations*
06/17/1991-12/31/1994 FY94: \$0 TOTAL: \$750,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T G WANG HQ/B M CARPENTER 13-Physics

NAGW 2844 **Vanderbilt University** **7471**
NAGW-2844/VANDERBILT UNIV/EVALUATION OF MICROSTRUC
TURAL DEVELOPMENT IN BULK, UNDERCOOLED ALLOYS
Period *Obligations*
01/31/1992-11/30/1994 FY94: \$105,000 TOTAL: \$315,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R N GRUGEL HQ/B M CARPENTER 13-Physics

NAGW 3385 **Vanderbilt University** **7472**
RELATIVE ABUNDANCE OF ICES IN THE DISKS OF T TAURI STARS:
IMPLICATIONS FOR COMET FORMATION
Period *Obligations*
02/16/1993-02/28/1996 FY94: \$15,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A WEINTRAUB HQ/J A NUTH 19-Phys Sci, NEC

NAGW 3764 **Vanderbilt University** **7473**
INTERCOMPARTMENTAL FLUID SHIFTS IN RESPONSE TO POS
TURAL AND GRAVITATIONAL FORCES
Period *Obligations*
10/06/1993-09/30/1994 FY94: \$80,000 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F A GAFFNEY HQ/F M SULZMAN 13-Physics

NAGW 3854 **Vanderbilt University** **7474**
VANDERBILT UNIV SCH MEDICINE - ADRENORECEPTOR
HYPERSENSITIVITY IN MODELS OF WEIGHTLESSNESS
Period *Obligations*
02/04/1994-12/31/1994 FY94: \$119,905 TOTAL: \$119,905
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I BIAGGIONI HQ/F M SULZMAN 56-Medical Sciences

NAGW 3873 **Vanderbilt University** **7475**
NAGW-3873/B VANDERBILT UNIV. 'THE SYMPATHETIC NERV OUS
SYSTEM IN THE ANEMIA OF WEIGHTLESSNESS'
Period *Obligations*
02/25/1994-02/28/1995 FY94: \$134,855 TOTAL: \$134,855
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D ROBERTSON HQ/F M SULZMAN 56-Medical Sciences

NAS 9-19196 **Vanderbilt University** **7476**
AUTONOMIC NEUROPHYSIOLOGY IN MICROGRAVITY
Period *Obligations*
09/29/1994-06/30/1995 FY94: \$70,000 TOTAL: \$70,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D ROBERTSON JSC/S SAWYER 56-Medical Sciences

NCC 2-696 **Vanderbilt University** **7477**
MECHANISMS OF CHANGES IN THE CONTROL OF BLOOD PRE
SSURE DURING BED REST
Period *Obligations*
10/25/1990-09/30/1993 FY94: \$0 TOTAL: \$377,348
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M ROBERTSON ARC/J VERNIKOS 56-Medical Sciences

NCC 3-187 **Vanderbilt University** **7478**
MECHANICAL TESTING PROGRAM FOR THERMAL BARRIER COA
TING DEVELOPMENT SUPPORT
Period *Obligations*
11/09/1990-02/10/1995 FY94: \$87,590 TOTAL: \$342,519
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A CRUSE LERC/R A MILLER 46-Mech Engr
T S KELLER LERC/W J BRINDLEY

NGT 00-010-024 **Vanderbilt University** **7479**
NGT 10024/B VANDERBILT UNIV 'MDAPP' , 10/1/93 STAR T
Period *Obligations*
05/04/1994-08/31/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A CRUSE HQ/G S SEIDEL 41-Aero Engr
A M MELLOR HQ/J R FACEY

NGT 00-040-021 **Vanderbilt University** **7480**
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRA M
ACTIVITIES OF TENNESSEE VALLEY AEROSPACE CORP.
Period *Obligations*
03/13/1990-01/31/1995 FY94: \$380,000 TOTAL: \$1,735,202
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H M STRAUSS HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-702 **Vanderbilt University** **7481**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
04/19/1991-05/31/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A CRUSE HQ/E SCHWARTZ 44-Civil Engr

NGT 00-050-883 **Vanderbilt University** **7482**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/06/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E GARCIA MSFC/F SIX 46-Mech Engr

NGT 00-050-946 **Vanderbilt University** **7483**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/22/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R PITZ LERC/F MONTEGANI 46-Mech Engr

NGT 00-051-044 **Vanderbilt University** **7484**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/01/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E GARCIA MSFC/F SIX 46-Mech Engr

NGT 00-051-053 **Vanderbilt University** **7485**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/06/1993-08/31/1996 FY94: \$21,212 TOTAL: \$42,424
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A CRUSE LERC/F MONTEGANI 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
TENNESSEE (Continued)**

NGT 00-051-267 **Vanderbilt University** **7486**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J BAYUZICK HQ/G LESANE 47-Materials Engr

NGT 00-051-356 **Vanderbilt University** **7487**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J BAYUZICK HQ/G LESANE 47-Materials Engr

NAG 9-18952 **Baylor College of Medicine** **7494**
MAGNETIC RESONANCE IMAGING AFTER EXPOSURE TO MICRO GRAVITY
Period *Obligations*
07/28/1993-03/31/1997 FY94: \$55,000 TOTAL: \$65,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A D LEBLANC JSC/A L PLAZA 56-Medical Sciences

NCC 9-23 **Baylor College of Medicine** **7495**
DEVELOPMENT AND EVALUATION OF A MINIATURE AXIAL FLOW PUMP
Period *Obligations*
02/03/1993-01/29/1995 FY94: \$430,000 TOTAL: \$640,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M E DEBAKEY JSC/R J BOZEMAN 56-Medical Sciences
G P NOON

TEXAS

NAG 2-500 **Baylor College of Medicine** **7488**
REGULATION OF BLOOD VOLUME DURING SPACEFLIGHT
Period *Obligations*
03/01/1988-02/28/1995 FY94: \$167,844 TOTAL: \$922,651
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C P ALFREY ARC/A D MANDEL 51-Biological Sci
R G NACHTMAN ARC/H A LEON

NAG 9-130 **Baylor College of Medicine** **7489**
PHYSIOLOGICAL MONITORING MAGNETIC IMAG
Period *Obligations*
04/01/1986-04/01/1994 FY94: \$0 TOTAL: \$817,841
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A LEBLANC JSC/V SCHNEIDER 56-Medical Sciences

NAGW 2862 **Baylor College of Medicine** **7490**
DEVELOPING SUSPENSION CULTURES TO STUDY CELL POLARITY
Period *Obligations*
01/31/1992-02/28/1994 FY94: \$0 TOTAL: \$236,776
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J I MULHOLLAND HQ/J K ALEXANDER 51-Biological Sci
HQ/D A HOLLAND

NAS 9-14662 **Baylor College of Medicine** **7491**
STUDY-EXTER PARAM SPACE FLIGHT-BLOOD VOLUME
Period *Obligations*
06/01/1975-02/28/1995 FY94: \$60,000 TOTAL: \$1,021,041
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C ALFREY JSC/H LANE 56-Medical Sciences

NAS 9-18024 **Baylor College of Medicine** **7492**
FLIGHT EXPERIMENT/ERYTHROKINETICS
Period *Obligations*
12/01/1988-01/01/1995 FY94: \$130,000 TOTAL: \$754,950
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C P ALFREY JSC/F BOOKER 56-Medical Sciences

NAS 9-18065 **Baylor College of Medicine** **7493**
ANALYSIS ELECTROPHORESIS SAMPLES
Period *Obligations*
03/21/1989-11/01/1994 FY94: \$9,000 TOTAL: \$231,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M Z ATASSI JSC/D MORRISON 56-Medical Sciences
R A WELCH

NAG 9-708 **Baylor University** **7496**
PHYSIOLOGICAL MONITORING WITH MAGNETIC RESONANCE IMAGING
Period *Obligations*
08/16/1993-08/01/1995 FY94: \$208,899 TOTAL: \$417,798
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A LEBLANC JSC/L TAGGART 56-Medical Sciences

NCC 9-28 **Houston Community College** **7497**
MANUFACTURING EDUCATION USING COMPUTER-AIDED TRAINING
Period *Obligations*
07/06/1994-01/16/1996 FY94: \$210,000 TOTAL: \$210,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G MORENO JSC/R BURKE 22-Computer Science

NAG 9-585 **Lamar University** **7498**
ION SPUTTER PROBE FOR IMPLANTED SOLAR WIND GASES IN LUNAR MATERIALS
Period *Obligations*
05/15/1992-06/01/1993 FY94: \$7,600 TOTAL: \$85,360
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L JORDAN JSC/T A SULLIVAN 32-Geological Sci

NAG 9-613 **Lamar University** **7499**
ABSORPTION HEAT PUMP FOR SPACE APPLICATION
Period *Obligations*
05/21/1992-01/01/1994 FY94: \$56,649 TOTAL: \$56,649
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E SIMON JSC/C H LIN 46-Mech Engr

NAG 9-620 **Lamar University** **7500**
ADVANCED CLOSED LIFE SUPPORT SYSTEM TECH
Period *Obligations*
06/15/1992-08/01/1994 FY94: \$0 TOTAL: \$150,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E SIMON JSC/M HOY 46-Mech Engr

NAG 9-626 **Lamar University** **7501**
ALTERNATE POWER SOURCE FOR SPACE SHUTTLE ORBITER HYDRAULIC SYSTEM
Period *Obligations*
07/10/1992-01/15/1993 FY94: \$19,231 TOTAL: \$19,231
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E SIMON JSC/S FISHER 45-Elec Engr

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 9-639 Lamar University 7502
DEVELOPMENT OF A HAND HELD ASTRONAUT
Period *Obligations*
09/09/1992-03/01/1995 FY94: \$0 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V D NGUYEN JSC/L MONFORD 46-Mech Engr

NAG 9-640 Lamar University 7503
REGENERATIVE LIFE SUPPORT SYSTEMS TECH DEVELOPMENT
Period *Obligations*
09/09/1992-11/01/1994 FY94: \$0 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E SIMON JSC/M HOY 46-Mech Engr

NAG 9-641 Lamar University 7504
COLD TRAPPING OF GASES AT PLANETARY AND INTERPLANETARY TEMPERATURES
Period *Obligations*
09/09/1992-03/15/1994 FY94: \$0 TOTAL: \$25,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L JORDAN JSC/T SULLIVAN 32-Geological Sci

NAG 9-695 Lamar University 7505
LOCOMOTION TRAINING OF LEGGED ROBOTS USING HYBRID MACHINE LEARNING TECHNIQUES
Period *Obligations*
06/29/1993-09/01/1995 FY94: \$50,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V D NGUYEN JSC/N H CHAFFEE 29-Math/Computer, NEC

NAG 9-696 Lamar University 7506
ANAEROBIC WASTE WATER TREATMENT PROCESS
Period *Obligations*
07/09/1993-03/01/1995 FY94: \$0 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K LI JSC/D M HOY 54-Env Biology

NAG 9-697 Lamar University 7507
TECHNOLOGY FOR DEVELOPMENT OF CONTROLLED ECOLOGICAL LIFE SUPPORT SYSTEM
Period *Obligations*
07/08/1993-03/01/1995 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K LI JSC/D M HOY 54-Env Biology

NAG 9-698 Lamar University 7508
EFFECTS OF FABRICATION PARAMETERS ON DAMAGE TOLERANCE IN FILAMENT WOUND GRAPHITE/PRESSURE VESSELS
Period *Obligations*
07/15/1993-12/01/1994 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V NGUYEN JSC/G ECORD 47-Materials Engr

NAG 9-699 Lamar University 7509
VOLATILES RELEASED FROM LUNAR BRECCIAS
Period *Obligations*
07/15/1993-07/01/1994 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J JORDAN JSC/T A SULLIVAN 19-Phys Sci, NEC

NAG 3-1500 Prairie View A&M University 7510
COMP ANALY OF VISCOUS FLOW THRU NOZZLE BY USING BOTH THE K-E TURB MODEL AND THE PD THOMAS TURB MODEL
Period *Obligations*
06/14/1993-10/31/1994 FY94: \$40,000 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I CHANG LERC/E T MELEASON 41-Aero Engr
LERC/D W LAM

NAG 5-2317 Prairie View A&M University 7511
THE PLASMA CONFIGURATION OF NEPTUNE'S MAGNETOSPHERE
Period *Obligations*
07/28/1993-10/31/1994 FY94: \$0 TOTAL: \$110,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T S HUANG GSFC/R E HARTLE 19-Phys Sci, NEC

NAG 9-318 Prairie View A&M University 7512
MICROWAVE IMAGING/ROBOT VISION
Period *Obligations*
09/01/1988-01/01/1994 FY94: \$0 TOTAL: \$289,349
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C L TOLLIVER JSC/G D ARNDT 45-Elec Engr

NAG 9-332 Prairie View A&M University 7513
SUSCEPTIBILITY OF MOS DEVICE TO ALPHA
Period *Obligations*
01/03/1989-08/31/1993 FY94: \$0 TOTAL: \$232,169
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F C WANG JSC/C HERMAN 19-Phys Sci, NEC

NAG 9-500 Prairie View A&M University 7514
RESEARCH SUPPORT THEORY OF RELIABILITY AND RADIATION TOLERANCE OF VLSI
Period *Obligations*
08/30/1991-02/28/1995 FY94: \$0 TOTAL: \$65,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A KUMAR JSC/E EMANUEL 19-Phys Sci, NEC

NAG 9-631 Prairie View A&M University 7515
FLOW BOILING ENHANCEMENT FOR THERMAL MGMT SYSTEMS
Period *Obligations*
09/01/1992-12/01/1994 FY94: \$96,300 TOTAL: \$311,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R D BOYD JSC/J P THORNBORROW 13-Physics

NAG 9-659 Prairie View A&M University 7516
LABORATORY FOR RADIATION STUDIES
Period *Obligations*
01/15/1993-01/15/1995 FY94: \$800,000 TOTAL: \$1,688,215
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T N FOGARTY JSC/M DIOQU 49-Engr, NEC

NAG 9-667 Prairie View A&M University 7517
LUNAR OUTPOST CONSTRUCTION/RADIATION PROTECTION USING CO-PRODUCT OF A LUNAR OXYGEN PLANT
Period *Obligations*
03/03/1993-08/31/1994 FY94: \$0 TOTAL: \$20,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R RADHA JSC/K E HENDERSON 44-Civil Engr
JSC/D S MCKAY

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 9-763 **Prairie View A&M University** **7518**
SPERICAL MICROSTRIP ARRAYS AS WIDE ANGLE SENSORS
Period *Obligations*
09/27/1994-11/30/1994 FY94: \$25,000 TOTAL: \$25,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
J FOSTER JSC/G D ARNDT 45-Elec Engr

NCC 9-31 **Prairie View A&M University** **7519**
COUPLING OF EARTH'S MAGNETOSPHERE AND IONOSPHERE IN A
REALISTIC MAGNETIC FIELD
Period *Obligations*
09/09/1994-09/01/1997 FY94: \$60,000 TOTAL: \$60,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
T SEN HUANG JSC/M DIOGU 13-Physics

NAG 1-1196 **Rice University** **7520**
THE SEMIDISCRETE GALERKIN FINITE ELEMENT MODELING OF
COMPRESSIBLE VISCOUS FLOW PAST AN AIRFOIL - FDP
Period *Obligations*
11/14/1990-12/31/1992 FY94: \$0 TOTAL: \$29,840
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A J MEADE JR. LARC/D O ALLISON 41-Aero Engr
LARC/L A SMITH

NAG 1-1433 **Rice University** **7521**
USE OF ARTIFICIAL NEURAL NETWORKS IN A REAL-TIME
EXPERIMENTAL AERODYNAMIC DATA ANALYSIS SYSTEM
Period *Obligations*
05/05/1992-05/04/1994 FY94: \$1 TOTAL: \$30,001
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
A J MEADE LARC/M B TRACY 41-Aero Engr

NAG 2-566 **Rice University** **7522**
DATA REDUCTION AND ANALYSIS OF PIONEER-VENUS ORBIT AL
ION MASS SPECTROMETER
Period *Obligations*
02/27/1989-03/31/1994 FY94: \$0 TOTAL: \$1,170,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
P A CLOUTIER ARC/L E LASHER 11-Astronomy
ARC/R O FIMMEL

NAG 5-262 **Rice University** **7523**
HIGH DISPERSION ULTRAVIOLET SPECTRA-ABUNDANCES OF
CARBON SILICON AND MAGNESIUM IN SELECTED GOLOCTU REGI
Period *Obligations*
08/01/1982-09/30/1994 FY94: \$1,500 TOTAL: \$348,264
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R J DUFOUR GSFC/D WEST 11-Astronomy
M MITRA
N R WALBORN

NAG 5-1195 **Rice University** **7524**
STUDY OF THE SOLAR WIND INTERACTIVE WITH MARS
Period *Obligations*
08/01/1989-10/31/1994 FY94: \$48,753 TOTAL: \$73,711
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
P A CLOUTIER GSFC/M H ACUNA 13-Physics

NAG 5-1489 **Rice University** **7525**
THREE DIMENSIONAL STRUCTURE OF THE EARTH'S ELECTRO
MAGNETIC FIELD
Period *Obligations*
12/10/1990-07/14/1994 FY94: \$0 TOTAL: \$625,876
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
T W HILL GSFC/T J BIRMINGHAM 13-Physics

NAG 5-1515 **Rice University** **7526**
MODELING BATSE GAMMA RAY BURST CONTINUUM SPECTRA
Period *Obligations*
04/02/1991-01/14/1995 FY94: \$45,000 TOTAL: \$165,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E P LIANG GSFC/J P NORRIS 11-Astronomy
GSFC/D A KNIFFEN

NAG 5-1547 **Rice University** **7527**
GAMMA RAYS FROM BLACK HOLES: COMPARISON OF GRO OBS
ERVATIONS WITH THEORY
Period *Obligations*
04/15/1991-08/14/1995 FY94: \$84,995 TOTAL: \$144,995
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E P LIANG GSFC/J P NORRIS 11-Astronomy
GSFC/D A KNIFFEN

NAG 5-1626 **Rice University** **7528**
HUBBLE SPACE TELESCOPE RESEARCH
Period *Obligations*
06/07/1991-10/31/1994 FY94: \$276,521 TOTAL: \$925,027
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
C R O'DELL GSFC/S SOBIESKI 11-Astronomy

NAG 5-2045 **Rice University** **7529**
SEARCH FOR PERIODICITIES AND LIGHT ECHOES IN BATSE
GAMMA-RAY BURST DATA
Period *Obligations*
07/17/1992-01/14/1994 FY94: \$0 TOTAL: \$21,628
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
E P LIANG GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2215 **Rice University** **7530**
PEACE INVESTIGATION FOR CLUSTER MISSION
Period *Obligations*
02/17/1993-02/28/1995 FY94: \$39,995 TOTAL: \$49,990
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
P H REIFF GSFC/M L GOLDSTEIN 13-Physics

NAG 5-2515 **Rice University** **7531**
INITIAL OSSE SKY SURVEY OBSERVATIONS: DEEP SURVEY IN VIRGO
SURVEY
Period *Obligations*
02/16/1994-02/28/1995 FY94: \$43,677 TOTAL: \$43,677
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R C HAYMES GSFC/J P NORRIS 11-Astronomy
J D KURFESS GSFC/N WHITE

NAG 5-2677 **Rice University** **7532**
A COMPREHENSIVE NEW STUDY OF CARBON AND SILICON
ABUNDANCES IN THE ISM OF GALAXIES
Period *Obligations*
08/11/1994-08/14/1995 FY94: \$37,422 TOTAL: \$37,422
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
R J DUFOUR GSFC/D WEST 11-Astronomy

NAG 5-2689 **Rice University** **7533**
CREATING THE PUBLIC CONNECTION: INTERACTIVE EXPERIENCES
WITH REAL-TIME EARTH AND SPACE SCIENCE
Period *Obligations*
08/24/1994-08/31/1994 FY94: \$150,000 TOTAL: \$150,000
Pnn. Invest. *NASA Tech. Officer* *CASE Category*
P REIF GSFC/N LAL 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 5-2690 **Rice University** **7534**
X-RAYS FROM GALACTIC BLACK HOLE CANDIDATES
Period *Obligations*
08/24/1994-02/29/1996 FY94: \$13,000 TOTAL: \$13,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E LANG GSFC/N WHITE 11-Astronomy

NAG 5-2736 **Rice University** **7535**
NATIONAL SOFTWARE EXCHANGE FOR THE HIGH PERFORMANC
COMPUTING COMMUNICATIONS PROGRAM
Period *Obligations*
09/22/1994-03/31/1995 FY94: \$510,000 TOTAL: \$510,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K KENNEDY GSFC/J R FISCHER 22-Computer Science

NAG 8-146 **Rice University** **7536**
PROJECT JOVE
Period *Obligations*
03/14/1990-02/01/1994 FY94: \$0 TOTAL: \$53,295
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J W FREEMAN MSFC/C R CHAPPELL 11-Astronomy
MSFC/N F SIX

NAG 9-447 **Rice University** **7537**
DETERIORATION OF LESS COMMON METALLIC SYSTEMS
Period *Obligations*
06/06/1990-02/01/1993 FY94: TOTAL: \$163,851
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F R BROTZEN JSC/W L CASTNER 47-Materials Engr
R B MCCLELLAN

NAG 9-457 **Rice University** **7538**
STUDY OF HYPERVELOCITY IMPACTS ON FIBER REINFORCED
PLATES, ANALYSIS AND EXPERIMENTS
Period *Obligations*
07/16/1990-09/01/1994 FY94: \$0 TOTAL: \$97,204
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Y C ANGEL JSC/E L CHRISTIANSEN 47-Materials Engr

NAG 9-461 **Rice University** **7539**
TELEROBOTICS LABORATORY NETWORK DEVELOPMENT
Period *Obligations*
08/29/1990-03/01/1995 FY94: \$42,000 TOTAL: \$761,330
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H JOHNSON JSC/L QUIOCHO 46-Mech Engr

NAG 9-628 **Rice University** **7540**
FULLERENE REINFORCED ALUMINUM ALLOYS AND STAINLESS S
TEEL FOR EMU PLSS
Period *Obligations*
07/17/1992-12/01/1994 FY94: \$0 TOTAL: \$82,153
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E V BARRERA JSC/C H LIN 46-Mech Engr
D CALLAHAN

NAG 9-681 **Rice University** **7541**
ANALYSIS OF WAVELET TECHNOLOGY FOR NASA APPLICA- TIONS
Period *Obligations*
04/08/1993-05/31/1994 FY94: \$0 TOTAL: \$65,182
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R O WELLS JSC/K KIRSHEN 21-Mathematics

NAG 9-719 **Rice University** **7542**
DEVELOPMENT PROGRAMMABLE ARTIFICIAL NEURAL NETWORK
Period *Obligations*
10/01/1993-08/31/1995 FY94: \$16,000 TOTAL: \$16,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A MEADE JR. JSC/S GOLDSTEIN 49-Engr, NEC

NAG 9-740 **Rice University** **7543**
MYOELECTRIC TELEOPERATION FOR ROBOTICS AND PROSTHETI
CS
Period *Obligations*
05/31/1994-05/31/1995 FY94: \$59,995 TOTAL: \$59,995
Prin. Invest. *NASA Tech. Officer* *CASE Category*
I D WALKER JSC/C HESS 45-Elec Engr

NAG 9-747 **Rice University** **7544**
TRANSIENT FREEZING IN 2 PHASE AMMONIA FLOW FOR SPA CE
STATION
Period *Obligations*
06/09/1994-07/01/1995 FY94: \$27,517 TOTAL: \$27,517
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B RAMASWAMY JSC/C H LIN 46-Mech Engr

NAG 9-748 **Rice University** **7545**
WAVELET DIGITAL SIGNAL PROCESSING IMAGE COMPRESSI ON
Period *Obligations*
06/13/1994-07/01/1995 FY94: \$58,704 TOTAL: \$58,704
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R O WELLS JSC/K KIRSHEN 21-Mathematics

NAGW 1655 **Rice University** **7546**
MAGNETOSPHERIC AND AURORAL PROCESSES
Period *Obligations*
02/24/1989-02/28/1994 FY94: \$81,000 TOTAL: \$664,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P H REIFF HQ/M M MELLOTT 13-Physics
HQ/T W PERRY

NAGW 2256 **Rice University** **7547**
IMPROVING THE SENSITIVITY OF NUCLEAR ASTRONOMY TEL
ESCOPIES
Period *Obligations*
11/16/1990-09/30/1994 FY94: \$0 TOTAL: \$347,963
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C HAYMES HQ/L KALUZIENSKI 11-Astronomy

NAGW 2683 **Rice University** **7548**
NAGW-2683/RICE UNIV/NUMERICAL SIMULATION OF TORUS-
DRIVEN PLASMA TRANSPORT IN THE JOVIAN MAGNETOSPHE
Period *Obligations*
08/12/1991-06/30/1994 FY94: \$0 TOTAL: \$201,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A WOLF HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 2824 **Rice University** **7549**
NUMERICAL CODES FOR TWO AND THREE DIMENSIONAL MAGN
ETOSPHERIC MHD EQUILIBRIUM MODELS
Period *Obligations*
01/06/1992-03/31/1994 FY94: \$0 TOTAL: \$136,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A WOLFE HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAGW 2826 **Rice University** **7550**
COUPLING OF THE LOW-LATITUDE BOUNDARY LAYER TO THE
MAGNETOSPHERIC INTERIOR
Period *Obligations*
01/15/1992-11/30/1994 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A WOLF HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NAGW 2845 **Rice University** **7551**
NON CONTACT THERMAL, PHYSICAL PROPERTY MEASUREMENT S
OF MULTI COMPONENTS, MULTIPHASE SYSTEMS AT RICE
Period *Obligations*
01/24/1992-11/30/1994 FY94: \$105,000 TOTAL: \$315,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H HAUGE HQ/B M CARPENTER 13-Physics
J L MARBRAVE

NAGW 2893 **Rice University** **7552**
THE GLOBAL CONFIGURATION OF NEPTUNE'S MAGNETOSPHER E
Period *Obligations*
02/19/1992-03/31/1995 FY94: \$0 TOTAL: \$147,752
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H VOIGT HQ/W L QUAIDE 19-Phys Sci, NEC

NAGW 3139 **Rice University** **7553**
NAGW-3139/RICE UNIV/CALMODULIN-RELATED PROTEINS IN
MECHANOSTIMULATED PLANTS
Period *Obligations*
07/24/1992-06/30/1995 FY94: \$60,000 TOTAL: \$160,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BRAAM HQ/T W HALSTEAD 51-Biological Sci

NAGW 3248 **Rice University** **7554**
ASTRONOMY ARCHAEOLOGY ADVENTURES
Period *Obligations*
10/26/1992-07/31/1993 FY94: \$0 TOTAL: \$5,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C HAYMES HQ/L S LAPIANA 11-Astronomy
HQ/G P NEWTON

NAGW 3504 **Rice University** **7555**
STUDY OF DYNAMICS AND MORPHOLOGY OF SONOSPHERIC ST
RUCTURES OF VENUS
Period *Obligations*
04/09/1993-02/28/1995 FY94: \$43,200 TOTAL: \$58,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P A CLOUTIER HQ/J T BERGSTRALH 31-Atmos Sci

NAGW 3536 **Rice University** **7556**
EROSPHERES AND ATMOSPHERIC LOSS OF THE TERRESTRIAL
PLANETS
Period *Obligations*
04/22/1993-04/30/1994 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J W CHAMBERLAIN HQ/H C BRINTON 19-Phys Sci, NEC

NAGW 3811 **Rice University** **7557**
NAGW-3811/B RICE UNIV 'INVEST. OF PLASMA-NEUTRAL I NTER.
AT TRITON', 8/16/93 START
Period *Obligations*
11/18/1993-08/15/1994 FY94: \$30,283 TOTAL: \$30,283
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P A CLOUTIER HQ/J T BERGSTRALH 19-Phys Sci, NEC

NAGW 4004 **Rice University** **7558**
MEASUREMENT OF ELECTRON IMPACT CROSS SECTIONS OF
IMPORTANCE
Period *Obligations*
05/09/1994-04/30/1997 FY94: \$75,462 TOTAL: \$75,462
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K SMITH HQ/M M MELLOTT 13-Physics
HQ/J D BOHLIN

NAGW 4035 **Rice University** **7559**
NUMERICAL SIMULATION OF POTATION-DRIVEN PLASMA
TRANSPORT IN THE JOVIAN MAGNETOSPHERE
Period *Obligations*
06/03/1994-03/31/1997 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A WOLF HQ/E C WHIPPLE 13-Physics
HQ/J D BOHLIN

NCC 2-5008 **Rice University** **7560**
SILICON AND CARBON ABUNDANCES IN THE ORION NEBULA AND
PLANETARY NEBULA
Period *Obligations*
10/21/1993-09/30/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R J DUFOUR ARC/A G TIELENS 11-Astronomy

NCCW 27 **Rice University** **7561**
MADIC/NASA INFRASTRUCTURE PROJECT
Period *Obligations*
04/09/1991-08/31/1994 FY94: \$750,000 TOTAL: \$1,500,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J E DENNIS HQ/P E HUNTER 41-Aero Engr
LARC/M D SALAS

NGT 00-030-072 **Rice University** **7562**
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/06/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S CHU HQ/D M BUTLER 33-Oceanography
T S LEDLEY HQ/G S WILSON

NGT 00-030-074 **Rice University** **7563**
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/06/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G A HADDAD HQ/D M BUTLER 33-Oceanography
A W DROXLER HQ/G S WILSON

NGT 00-050-379 **Rice University** **7564**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/10/1988-01/31/1993 FY94: \$0 TOTAL: \$77,276
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R DE FIGUEIREDO HQ/F C OWENS 45-Elec Engr

NGT 00-050-447 **Rice University** **7565**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/14/1989-08/31/1993 FY94: \$0 TOTAL: \$76,297
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H JOHNSON HQ/F C OWENS 45-Elec Engr

NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)

NGT 00-050-557 **Rice University** **7566**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/09/1990-06/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
L V MCINTIRE HQ/F C OWENS 43-Chem Engr

NGT 00-050-569 **Rice University** **7567**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/11/1990-12/26/1993 FY94: \$0 TOTAL: \$63,662
Prin. Invest. NASA Tech. Officer CASE Category
F C MICHEL HQ/F C OWENS 11-Astronomy

NGT 00-050-580 **Rice University** **7568**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/17/1990-06/14/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
W ZWAENEPOEL HQ/F C OWENS 22-Computer Science

NGT 00-050-698 **Rice University** **7569**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/07/1991-05/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A FEW HQ/F C OWENS 31-Atmos Sci

NGT 00-050-746 **Rice University** **7570**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-08/14/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J BENNETT HQ/F C OWENS 22-Computer Science

NGT 00-050-924 **Rice University** **7571**
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/15/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
E P LIANG GSFC/G SOFFEN 13-Physics

NGT 00-051-019 **Rice University** **7572**
NGT-51019/GRADUATE STUDENT RESEARCHERS PROGRAM/RIC E UNIVERSITY
Period Obligations
05/04/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
G H VOIGT GSFC/G SOFFEN 13-Physics

NGT 00-051-050 **Rice University** **7573**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/02/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
B AAZHANG JSC/S GOLSDSTEIN 46-Mech Engr

NGT 00-051-079 **Rice University** **7574**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/11/1993-06/30/1996 FY94: \$22,000 TOTAL: \$41,724
Prin. Invest. NASA Tech. Officer CASE Category
R C HAYMES HQ/D HOLLAND 13-Physics

NGT 00-051-186 **Rice University** **7575**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/29/1993-08/31/1996 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
P A CLOUTIER GSFC/M BURRELL 13-Physics

NGT 00-051-230 **Rice University** **7576**
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/08/1994-05/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
A J MEADE JR JSC/S GOLDSTEIN 46-Mech Engr

NGT 00-070-251 **Rice University** **7577**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
04/28/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
I D WALKER JSC/S GOLDSTEIN 49-Engr. NEC

NGT 00-070-353 **Rice University** **7578**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period Obligations
09/02/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
A MEADE HQ/D K RUSSELL 46-Mech Engr

NGT 00-090-140 **Rice University** **7579**
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
10/09/1992-08/14/1994 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
R STABELL HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-165 **Rice University** **7580**
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
R STABELL HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-219 **Rice University** **7581**
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period Obligations
09/23/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
R STABELL HQ/D K RUSSELL 99-Multi-Discip

NAG 9-749 **Sam Houston State University** **7582**
STATISTICAL MODELING AND SENSITIVITY ANALYSIS IN SUPPORT OF REGENERATIVE LIFE SUPPORT SYSTEMS
Period Obligations
06/24/1994-07/01/1995 FY94: \$36,000 TOTAL: \$36,000
Prin. Invest. NASA Tech. Officer CASE Category
C R HALLUM JSC/D L HENNINGER 21-Mathematics
D M CARPENTER

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAGW 2915 Southern Methodist University 7583
STRUCTURAL, KINEMATIC, AND STRAIN HISTORY ANALYSIS
Period *Obligations*
02/27/1992-02/28/1995 FY94: \$47,001 TOTAL: \$140,870
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V L HANSEN HQ/J M BOYCE 32-Geological Sci

NGT 00-050-536 Southern Methodist University 7584
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/31/1989-08/21/1993 FY94: \$0 TOTAL: \$84,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J H DULA JSC/S GOLDSTEIN 49-Engr, NEC

NAG 1-631 Southwest Texas State University 7585
TRIFLUOROMETHYL - SUBSTITUTED POLYIMIDES
Period *Obligations*
01/14/1986-01/14/1995 FY94: \$29,904 TOTAL: \$387,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P E CASSIDY LARC/A K ST CLAIR 12-Chemistry
LARC/D M STOKLEY

NGT 00-070-271 Southwest Texas State University 7586
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/29/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P E CASSIDY LARC/E J PRIOR 12-Chemistry

NAGW 3028 Sul Ross State University 7587
NAGW-3028/SUL ROSS STATE UNIV/CORRELATION OF ERUPT ION
CONDITIONS AND COMPOSITIONS OF LUNAR LAVAS
Period *Obligations*
04/17/1992-12/31/1993 FY94: \$0 TOTAL: \$13,530
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L STARK HQ/J M BOYCE 32-Geological Sci

NAG 1-793 Texas A&M University 7588
AN INITIAL INVESTIGATION INTO METHODS OF COMPUTING
TRANSONIC AERODYNAMIC SENSITIVITY COEFFICIENTS
Period *Obligations*
06/29/1987-12/31/1993 FY94: \$0 TOTAL: \$110,395
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A CARLSON LARC/W WHITLOW 41-Aero Engr
LARC/P NEWMAN

NAG 1-1003 Texas A&M University 7589
NONEQUILIBRIUM RADIATION AND CHEMISTRY MODELS FOR
AEROCAPTURE VEHICLE FLOWFIELDS
Period *Obligations*
06/27/1989-12/31/1993 FY94: \$1 TOTAL: \$209,910
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A CARLSON LARC/L C HARTUNG 41-Aero Engr

NAG 1-1066 Texas A&M University 7590
KNOWLEDGE-BASED PROCESSING FOR AIRCRAFT FLIGHT
CONTROL - FDP
Period *Obligations*
10/23/1989-08/31/1994 FY94: \$1 TOTAL: \$97,134
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J H PAINTER LARC/R M HUESCHEN 49-Engr, NEC
LARC/J M MCMANUS

NAG 1-1273 Texas A&M University 7591
FLOW FIELD MEASUREMENTS IN A DUCT WITH CONVEX AND
CONCAVE CURVATURE FDP
Period *Obligations*
04/30/1991-11/30/1993 FY94: \$0 TOTAL: \$37,766
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A AHMED LARC/S K ROBINSON 41-Aero Engr

NAG 1-1297 Texas A&M University 7592
INVESTIGATION OF POLYMERIC MATERIALS EXPOSED TO THE LOW
EARTH ORBIT ENVIRONMENT FDP
Period *Obligations*
06/13/1991-06/14/1993 FY94: \$0 TOTAL: \$65,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T STRGANAC LARC/J L JONES 47-Materials Engr
LARC/W H KINARD

NAG 1-1324 Texas A&M University 7593
FAILURE ANALYSIS OF 2D AND 3D WOVEN COMPOSITES
INCREMENTAL FUNDING THROUGH DECEMBER 31, 1991
Period *Obligations*
08/30/1991-12/31/1994 FY94: \$55,000 TOTAL: \$161,599
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J D WHITCOMB LARC/J R REEDER 46-Mech Engr
LARC/C C POE

NAG 1-1407 Texas A&M University 7594
ANALYSIS OF STATIC CONTACT IN LAMINATED COMPOSITE PLATES
USING DAMAGE MECHANICS
Period *Obligations*
03/12/1992-09/30/1994 FY94: \$73,775 TOTAL: \$194,446
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D H ALLEN LARC/C E HARRIS 46-Mech Engr
LARC/W C JACKSON

NAG 1-1522 Texas A&M University 7595
A TWO ELEMENT LAMINAR FLOW AIRFOIL OPTIMIZED FOR
CRUISE
Period *Obligations*
06/18/1993-05/31/1995 FY94: \$10,000 TOTAL: \$19,989
Prin. Invest. *NASA Tech. Officer* *CASE Category*
O W MICKS LARC/M F CARD 41-Aero Engr
K D KORKAN LARC/R L YANG

NAG 1-1596 Texas A&M University 7596
INVESTIGATION INTO DESIGN METHODOLOGIES FOR
AIRFOILS/WINGS AT SEPARATED OR NEAR-SEPARATED
Period *Obligations*
02/17/1994-02/16/1995 FY94: \$37,117 TOTAL: \$37,117
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T A GALLY LARC/R L CAMPBELL 41-Aero Engr
LARC/R E MINECK

NAG 1-1618 Texas A&M University 7597
WAVELET GALERKIN METHODS AND MULTIREOLUTION ANALYSIS
IN COMPUTATION MECHANICS
Period *Obligations*
04/21/1994-04/30/1995 FY94: \$17,000 TOTAL: \$17,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A KURDILA LARC/J M HOUSNER 46-Mech Engr
T STRGANAC
R LAZAROV

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 3-181 Texas A&M University 7598 COMPRESSIBLE AND INCOMPRESSIBLE FLUID SEALS, IN-FLUENCE <i>Period</i> 04/27/1981-09/30/1994 <i>Pnn Invest</i> D W CHILDS C C NELSON G MORRISON <i>Obligations</i> FY94: \$0 NASA Tech Officer LERC/R C HENDRICKS CASE Category 46-Mech Engr TOTAL: \$2,230,352	NAG 3-1368 Texas A&M University 7606 CONSTRUCTION AND TESTING OF A SPACE READY RECTENNA <i>Period</i> 09/17/1992-03/07/1993 <i>Pnn Invest</i> F LITTLE A BROWN <i>Obligations</i> FY94: \$0 NASA Tech Officer LERC/J M BOZEK CASE Category 45-Elec Engr TOTAL: \$29,785
NAG 3-763 Texas A&M University 7599 ACTIVE CONTROL OF TRANSIENT ROTOR VIBRATIONS <i>Period</i> 12/11/1986-03/29/1994 <i>Pnn Invest</i> A B PALAZZOLO <i>Obligations</i> FY94: \$0 NASA Tech Officer LERC/A F KASCAK CASE Category 46-Mech Engr TOTAL: \$401,895	NAG 3-1434 Texas A&M University 7607 THERMOHYDRODYNAMIC ANALYSIS OF CRYOGENIC LIQUID TURBULENT FLOW FLUID FILM BEARINGS <i>Period</i> 01/11/1993-12/31/1994 <i>Pnn Invest</i> L SAN ANDRES <i>Obligations</i> FY94: \$124,012 NASA Tech Officer LERC/J F WALKER CASE Category 46-Mech Engr TOTAL: \$223,888
NAG 3-891 Texas A&M University 7600 CYOGENIC DAMPERS VERIFICATION <i>Period</i> 02/29/1988-12/26/1994 <i>Pnn Invest</i> A B PALAZZOLO <i>Obligations</i> FY94: \$30,000 NASA Tech Officer LERC/A F KASCAK CASE Category 46-Mech Engr TOTAL: \$493,004	NAG 3-1512 Texas A&M University 7608 COMBINED NUMERICAL/ANALYTICAL PERTURBATION SOLUTIONS OF THE NAVIER-STOKES EQU W/APPL TO AERODYN AND G <i>Period</i> 09/23/1993-12/23/1994 <i>Pnn Invest</i> J A CATON <i>Obligations</i> FY94: \$31,678 NASA Tech Officer LERC/J K LYTIE CASE Category 46-Mech Engr TOTAL: \$42,678
NAG 3-1144 Texas A&M University 7601 DEV OF AN ADV COMPUTER CODE FOR SIMULATION OF DYN BEHAVIOR OF HIGH PRESSURE GAS TURBINE ENGINES <i>Period</i> 02/21/1990-02/10/1995 <i>Pnn Invest</i> T SCHOBELRI <i>Obligations</i> FY94: \$56,896 NASA Tech Officer LERC/D E PAXSON CASE Category 41-Aero Engr TOTAL: \$248,080	NAG 3-1542 Texas A&M University 7609 ACTIVE CONTROL OF VIBRATION SUBTOPIC - HIGH TEMPERATURE MAGNETIC THRUST BEARING DEVELOPMENT <i>Period</i> 09/29/1993-03/31/1995 <i>Pnn Invest</i> A B PALAZZOLO <i>Obligations</i> FY94: \$60,000 NASA Tech Officer LERC/A F KASCAK CASE Category 46-Mech Engr TOTAL: \$72,490
NAG 3-1235 Texas A&M University 7602 INVESTIGATION AND FEASIBILITY ASSESSMENT OF TOPAZ-II DERIVATIVES FOR SPACE POWER APPLICATIONS <i>Period</i> 03/28/1991-05/31/1993 <i>Pnn Invest</i> A G PARLES K L PEDDICORD <i>Obligations</i> FY94: \$0 NASA Tech Officer LERC/S M STEVENSON CASE Category 49-Engr, NEC TOTAL: \$113,373	NAG 3-1556 Texas A&M University 7610 COMPUTATIONAL METHODS FOR ACTIVE CONTROL OF ROTOR VIBRATION <i>Period</i> 01/04/1994-02/28/1995 <i>Pnn Invest</i> A B PALAZZOLO <i>Obligations</i> FY94: \$45,000 NASA Tech Officer LERC/C LAWRENCE CASE Category 47-Materials Engr TOTAL: \$45,000
NAG 3-1255 Texas A&M University 7603 METHODS TO ATTAIN HI ENERGY EFFICIENCIES AND LONG LIFE TIMES IN POLYMER ACID FUEL CELLS <i>Period</i> 02/27/1991-03/08/1993 <i>Pnn Invest</i> S SRINIVASAN A J APPLEBY <i>Obligations</i> FY94: \$0 NASA Tech Officer LERC/P R PROKOPIUS CASE Category 43-Chem Engr TOTAL: \$149,567	NAG 3-1656 Texas A&M University 7611 HIGH TURBULENCE EFFECTS ON TURBINE BLADE FILM COOLING HEAT TRANSFER PERFORMANCE USING TRANSIENT LIQUID <i>Period</i> 08/11/1994-08/31/1995 <i>Pnn Invest</i> J C HAN <i>Obligations</i> FY94: \$5,994 NASA Tech Officer LERC/P E POINSATTE CASE Category 41-Aero Engr TOTAL: \$5,994
NAG 3-1270 Texas A&M University 7604 ANALYSIS OF NEW COMPOSITES ARCHITECTURES <i>Period</i> 04/16/1991-08/31/1995 <i>Pnn Invest</i> J D WHITCOMB <i>Obligations</i> FY94: \$0 NASA Tech Officer LERC/C C CHAMIS LERC/P L MURTHY CASE Category 41-Aero Engr TOTAL: \$107,746	NAG 5-655 Texas A&M University 7612 BALLOON MATERIALS, SCIENCE AND ENGINEERING <i>Period</i> 03/01/1989-08/31/1994 <i>Pnn Invest</i> J NOEL <i>Obligations</i> FY94: \$30,698 NASA Tech Officer GSFC/H C NEEDLEMAN GSFC/L J EARLY CASE Category 19-Phys Sci, NEC TOTAL: \$424,915
NAG 3-1326 Texas A&M University 7605 INVESTIGATION OF NATURAL AND MAN-MADE RADIATION EFFECTS ON CREWS ON LONG-DURATION SPACE MISSIONS <i>Period</i> 02/28/1992-12/31/1993 <i>Pnn Invest</i> W E BOLCH A G PARLOS <i>Obligations</i> FY94: \$0 NASA Tech Officer LERC/S M STEVENSON CASE Category 49-Engr, NEC TOTAL: \$99,999	NAG 5-673 Texas A&M University 7613 INVESTIGATION OF BALLOON MATERIAL PROPERTIES EXPOSED TO THE LOW EARTH ORBIT ENVIRONMENT <i>Period</i> 10/19/1990-05/31/1995 <i>Pnn Invest</i> T W STRGANAC <i>Obligations</i> FY94: \$89,996 NASA Tech Officer GSFC/I S SMITH GSFC/H C NEEDLEMAN CASE Category 47-Materials Engr TOTAL: \$208,885

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 5-869	Texas A&M University	7614
STATISTICAL RESEARCH FOR PRECIPITATION FROM SPACE		
<i>Period</i>	<i>Obligations</i>	
02/01/1987-04/30/1994	FY94: \$0	TOTAL: \$675,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G R NORTH	GSFC/T L BELL	31-Atmos Sci
NAG 5-1423	Texas A&M University	7615
PARTICIPATION IN TRMM-1 AIRCRAFT EXPERIMENT		
<i>Period</i>	<i>Obligations</i>	
08/02/1990-05/14/1994	FY94: \$75,000	TOTAL: \$257,417
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T T WILHEIT	GSFC/J R WANG GSFC/J C SHIUE	31-Atmos Sci
NAG 5-1568	Texas A&M University	7616
RADIOMETER TEAM LEADER		
<i>Period</i>	<i>Obligations</i>	
05/31/1991-05/31/1995	FY94: \$96,246	TOTAL: \$360,361
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T T WILHEIT	GSFC/J WEINMAN	31-Atmos Sci
NAG 5-1569	Texas A&M University	7617
VALIDATION AND TRANSFERABILITY OF TROPICAL RAIN ESTIMATION METHODS		
<i>Period</i>	<i>Obligations</i>	
05/13/1991-09/30/1995	FY94: \$346,595	TOTAL: \$710,800
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E ZIPSER	GSFC/O THIELE	31-Atmos Sci
NAG 5-1590	Texas A&M University	7618
STATISTICAL STUDIES FOR THE TROPICAL RAINFALL MEASURING MISSION		
<i>Period</i>	<i>Obligations</i>	
06/24/1991-06/30/1995	FY94: \$75,000	TOTAL: \$351,723
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G R NORTH	GSFC/T BELL	31-Atmos Sci
NAG 5-2033	Texas A&M University	7619
INTENSIVE BOUNDARY LAYER WATER CYCLE STUDY IN THE WESTERN EQUATORIAL PACIFIC		
<i>Period</i>	<i>Obligations</i>	
07/17/1992-07/31/1994	FY94: \$35,000	TOTAL: \$65,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E ZIPSER	GSFC/O W THIELE	31-Atmos Sci
NAG 5-2089	Texas A&M University	7620
TRMM RELATED OBSERVATIONS OF TROPICAL RAINFALL STRUCTURE IN TOGA/COARE		
<i>Period</i>	<i>Obligations</i>	
09/02/1992-07/14/1994	FY94: \$0	TOTAL: \$44,989
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T WILHEIT	GSFC/O W THIELE	31-Atmos Sci
NAG 5-2221	Texas A&M University	7621
COMET COMMUNICATIONS EXPERIMENT PROGRAM		
<i>Period</i>	<i>Obligations</i>	
02/22/1993-08/31/1994	FY94: \$0	TOTAL: \$39,188
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
F LITTLE	GSFC/J CHITWOOD GSFC/K L PERKO	49-Engr, NEC
NAG 8-294	Texas A&M University	7622
DESIGN REVIEW AND ANALYSIS FOR SEAL TESTING RIG		
<i>Period</i>	<i>Obligations</i>	
06/23/1993-08/31/1994	FY94: \$0	TOTAL: \$62,507
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D CHILDS	MSFC/H G GIBSON MSFC/R L THOM	46-Mech Engr
NAG 8-299	Texas A&M University	7623
MODELING AND DIAGNOSING TROPICAL MOISTURE VARIATION		
<i>Period</i>	<i>Obligations</i>	
10/21/1993-12/20/1994	FY94: \$73,980	TOTAL: \$73,980
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J P MC GUIRK	MSFC/J W KAUFMAN	31-Atmos Sci
NAG 8-912	Texas A&M University	7624
WET NET		
<i>Period</i>	<i>Obligations</i>	
05/27/1992-05/31/1995	FY94: \$75,000	TOTAL: \$265,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E J ZIPSER J P MCGUIRK	MSFC/S GOODMAN	31-Atmos Sci
NAG 8-989	Texas A&M University	7625
ENHANCED SIMULATION SOFTWARE FOR ROCKET PARTS		
<i>Period</i>	<i>Obligations</i>	
09/24/1993-12/31/1994	FY94: \$28,500	TOTAL: \$28,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A B PALAZZOLO	MSFC/J VARGAS	46-Mech Engr
NAG 9-331	Texas A&M University	7626
SPACE RADIATION/MATERIALS/DEVICES		
<i>Period</i>	<i>Obligations</i>	
01/15/1989-06/30/1994	FY94: \$0	TOTAL: \$384,382
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J S LINDER	JSC/C HERMAN	31-Atmos Sci
NAG 9-395	Texas A&M University	7627
THE FRACTURE CRITERIA OF BERYLLIUM SHEET AND TUBE		
<i>Period</i>	<i>Obligations</i>	
09/01/1989-07/01/1994	FY94: \$0	TOTAL: \$73,158
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J HERRERA	JSC/W L CASTNER	47-Materials Engr
NAG 9-431	Texas A&M University	7628
WATER POST TREATMENT		
<i>Period</i>	<i>Obligations</i>	
05/21/1990-05/01/1993	FY94: \$0	TOTAL: \$129,473
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M EHSANI	JSC/J D BURKE	45-Elec Engr
NAG 9-491	Texas A&M University	7629
ROBUST ADAPTIVE CONTROL TECHNOLOGY FOR ADVANCED SPACED SPACE SYSTEMS		
<i>Period</i>	<i>Obligations</i>	
01/01/1991-06/01/1995	FY94: \$0	TOTAL: \$149,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A G CARLOS	JSC/J W SUNKEL	49-Engr, NEC
NAG 9-511	Texas A&M University	7630
REWETTING OF HOT GROOVED SURFACES		
<i>Period</i>	<i>Obligations</i>	
04/26/1991-05/01/1993	FY94: \$0	TOTAL: \$59,308
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G P PETERSON	JSC/E K UNGER	46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 9-566 Texas A&M University 7631
LONG RANGE TARGETING FOR SPACE BASED RENDEZVOUS
Period *Obligations*
10/09/1991-10/01/1994 FY94: \$0 TOTAL: \$86,946
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R C REDFIELD JSC/L G MUNFORD 46-Mech Engr
L J EVERETT

NAG 9-716 Texas A&M University 7639
NONINVASIVE OPTICAL DETECTION OF GLUCOSE
Period *Obligations*
10/08/1993-08/31/1994 FY94: \$15,933 TOTAL: \$15,933
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L COTE JSC/S H GOLDSTEIN 49-Engr, NEC

NAG 9-582 Texas A&M University 7632
GROWING WHEAT TO MATURITY AT REDUCED GAS PRESSURES
Period *Obligations*
04/09/1992-07/01/1993 FY94: TOTAL: \$78,855
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B ETTER JSC/D L HENNINGER 51-Biological Sci

NAG 9-730 Texas A&M University 7640
PERFORMANCE ENHANCEMENT OF HEAT AND MASS TRANSFER
DEVICES WITH ELECTROHYDRODYNAMICS
Period *Obligations*
05/16/1994-05/01/1995 FY94: \$35,250 TOTAL: \$35,250
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J SEYED-YAGOOBI JSC/K MILLER 45-Elec Engr

NAG 9-598 Texas A&M University 7633
HIGH ENERGY EFFICIENCY AND HIGH POWER DENSITY PROT ON
EXCHANGE MEMBRANE FUEL CELLS
Period *Obligations*
06/01/1992-08/01/1993 FY94: \$0 TOTAL: \$69,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A J APPLEBY JSC/D L BELANGER 45-Elec Engr
S R SRINIVASAN

NAG 9-735 Texas A&M University 7641
ITERATIVE INTERACTIVE IMAGE RESTORATION
Period *Obligations*
05/18/1994-10/01/1994 FY94: \$9,500 TOTAL: \$9,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G E HITE JSC/M GAUNCE 22-Computer Science

NAG 9-629 Texas A&M University 7634
SELF CALIBRATING AUTOTRAC
Period *Obligations*
08/20/1992-09/01/1995 FY94: \$0 TOTAL: \$24,917
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L J EVERETT JSC/L MONFORD 46-Mech Engr

NAG 9-751 Texas A&M University 7642
ADVANCED MOTOR DRIVE STUDIES FOR ORBITER HYDRAULIC
PUMP
Period *Obligations*
06/21/1994-05/01/1995 FY94: \$46,491 TOTAL: \$46,491
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M EHSANI JSC/D BELLANGER 45-Elec Engr

NAG 9-642 Texas A&M University 7635
PHOSPHORUS REACTIONS WITH LUNAR SIMULANT
Period *Obligations*
09/16/1992-05/01/1995 FY94: \$15,000 TOTAL: \$27,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L R HOZZNER JSC/- 54-Env Biology

NAGW 1194 Texas A&M University 7643
CENTER FOR THE COMMERCIAL DEVE. OF SPACE POWER
Period *Obligations*
09/30/1987-10/31/1994 FY94: \$900,000 TOTAL: \$8,843,300
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F R BEST HQ/C LIVINGSTON 45-Elec Engr
D R BOYLE HQ/V CEVENINI

NAG 9-668 Texas A&M University 7636
PEIZO ELECTRIC CRYSTALS AS VIBRATION CONTROL DEVIC ES
FOR FLEXIBLE SPACECRAFT STRUCTURES
Period *Obligations*
03/02/1993-03/01/1995 FY94: \$0 TOTAL: \$58,969
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S MIDTURI JSC/D A HAMILTON 46-Mech Engr

NAGW 1779 Texas A&M University 7644
THE ELECTROCHEMICAL INCINERATION OF HUMAN WASTES IN
CONFINED
Period *Obligations*
06/22/1989-12/31/1992 FY94: TOTAL: \$279,505
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J O BROCKIS HQ/P L EVANICH 43-Chem Engr
JSC/A F BEHREND

NAG 9-669 Texas A&M University 7637
FEASIBILITY OF LETTUCE GROWTH AT HYPOXIC AND SUBAMBIENT
TOTAL GAS PRESSURE
Period *Obligations*
04/01/1993-04/01/1995 FY94: \$30,000 TOTAL: \$97,463
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M DREW JSC/D HENNINGER 51-Biological Sci
R STAHL
M DRAW

NAGW 1836 Texas A&M University 7645
STATISTICAL RESEARCH FOR PRECIPITATION FROM SPACE
Period *Obligations*
09/06/1989-09/30/1992 FY94: TOTAL: \$104,842
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H STEWART HQ/G S LAGERLOEF 33-Oceanography
HQ/W S WILSON

NAG 9-680 Texas A&M University 7638
THE DEVELOPMENT OF NONEQUILIBRIUM HEAT TRANSFER
COMPUTATIONAL MODELFOR VEHICLE FLOWFIELD METHODS'
Period *Obligations*
04/01/1993-06/01/1995 FY94: \$0 TOTAL: \$55,563
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A CARLSON JSC/C D SCOTT 41-Aero Engr

NAGW 1979 Texas A&M University 7646
STUDIES OF GEOSTROPHIC TURBULENE USING GEOSAT DATA
Period *Obligations*
05/22/1990-03/31/1995 FY94: \$102,000 TOTAL: \$297,677
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H STEWART HQ/G S LAGERLOEF 33-Oceanography
HQ/W S WILSON

NASA'S UNIVERSITY PROGRAM **TEXAS (Continued)**

NAGW 2427 Texas A&M University 7647
 HYDROLOGIC RAINFIELD MODELS AND REMOTE SENSING
Period Obligations
 04/12/1991-01/31/1994 FY94: \$0 TOTAL: \$219,049
Prin. Invest. NASA Tech. Officer CASE Category
 J B VALDES HQ/G ASRAR 39-Env Sci, NEC
 G R NORTH HQ/J S THEON

NAGW 2922 Texas A&M University 7648
 EXPERIMENTAL DETERMINATION OF THE STRUCTURE OF THE SEA SURFACE INFLUENCING RADIO OBSERVATIONS
Period Obligations
 02/27/1992-01/31/1995 FY94: \$50,000 TOTAL: \$155,893
Prin. Invest. NASA Tech. Officer CASE Category
 R STEWART HQ/J S THEON 31-Atmos Sci

NAGW 3054 Texas A&M University 7649
 NAGW-3054/TEXAS AANDM RESEARCH FOUNDATION/ATMOSPHERIC CONDENSATIONAL PROPERTIES OF ULTRAFINE CHAIN
Period Obligations
 04/17/1992-08/31/1995 FY94: \$155,220 TOTAL: \$444,226
Prin. Invest. NASA Tech. Officer CASE Category
 W H MARLOW HQ/J K ALEXANDER 31-Atmos Sci
 HQ/D A HOLLAND

NAGW 3186 Texas A&M University 7650
 NAGW-3186/TEXAS AANDM UNIV/CONSTRUCTING A RECORD OF TROPICAL DEFORESTATION USING LANDSAT, AVHRR,
Period Obligations
 08/28/1992-07/31/1994 FY94: \$60,696 TOTAL: \$118,234
Prin. Invest. NASA Tech. Officer CASE Category
 J GIARDINO HQ/M R HALPERT 39-Env Sci, NEC
 F HOSKINS HQ/D M BUTLER

NAGW 3363 Texas A&M University 7651
 COMP. BET. CZCS-MEA. AER. RAD. AND MAR. BOUNDARY LAYER MINERAL AER. CON.
Period Obligations
 02/18/1993-02/28/1994 FY94: \$0 TOTAL: \$48,645
Prin. Invest. NASA Tech. Officer CASE Category
 N W TINDALE HQ/J A KAYE 31-Atmos Sci
 HQ/R E MURPHY

NAGW 3442 Texas A&M University 7652
 OBSERVATIONAL AND MODEL STUDIES OF LARGE SCALE MIXING PROCESSES IN THE STRATOSPHERE
Period Obligations
 03/17/1993-02/28/1995 FY94: \$89,822 TOTAL: \$159,811
Prin. Invest. NASA Tech. Officer CASE Category
 K P BOWMAN HQ/J A KAYE 31-Atmos Sci
 HQ/R E MURPHY

NAGW 3652 Texas A&M University 7653
 THE REMOTE SENSING OF MINERAL AEROSOLS AND THEIR IMPACT ON PHYTOPLANKTON PRODUCTIVITY USING SEAWIFS
Period Obligations
 06/15/1993-04/30/1995 FY94: \$34,707 TOTAL: \$59,707
Prin. Invest. NASA Tech. Officer CASE Category
 N W TINDALE HQ/J A KAYE 33-Oceanography
 HQ/R E MURPHY

NAGW 3963 Texas A&M University 7654
 MARS GEOLOGIC MAPPING: DAO AND NIGER VALLES
Period Obligations
 04/22/1994-02/14/1996 FY94: \$15,640 TOTAL: \$15,640
Prin. Invest. NASA Tech. Officer CASE Category
 K H PRICE HQ/R WILLIAMS 32-Geological Sci

NAS 1-19373 Texas A&M University 7655
 CONTROL LAWS FOR NEAR MINIMUM-TIME MANEUVERS WITH VIBRATION SUPPRESSION
Period Obligations
 08/23/1991-06/23/1994 FY94: \$0 TOTAL: \$185,000
Prin. Invest. NASA Tech. Officer CASE Category
 S R VADELI LARC/R TAYLOR 49-Engr, NEC
 J L JUNKINS LARC/J R NEWSOM

NAS 5-32593 Texas A&M University 7656
 STUDY ENTITLED MIMR SCIENCE TEAM MEMBERSHIP
Period Obligations
 12/15/1993-12/31/1994 FY94: \$110,384 TOTAL: \$110,384
Prin. Invest. NASA Tech. Officer CASE Category
 T T WILHEIT GSFC/P HWONG 31-Atmos Sci

NAS 8-37821 Texas A&M University 7657
 PUMP-IMPELLER SHROUD SURFACES STUDY
Period Obligations
 04/26/1989-09/30/1993 FY94: \$0 TOTAL: \$298,241
Prin. Invest. NASA Tech. Officer CASE Category
 W CHILDS MSFC/J CANNON 41-Aero Engr
 E BASKHARONE MSFC/L GROSS

NAS 9-18882 Texas A&M University 7658
 WIND TUNNEL SUPPORT
Period Obligations
 04/16/1993-04/16/1996 FY94: \$85,000 TOTAL: \$120,000
Prin. Invest. NASA Tech. Officer CASE Category
 O NICKS JSC/R E MEYERSON 41-Aero Engr

NASW 4679 Texas A&M University 7659
 NASW-4679/TX ENG'G EXPERIMENT STATION/NASA RTTC LOCATED IN THE MID-CONTINENT REGION OF THE U.S.
Period Obligations
 12/20/1991-12/31/1994 FY94: \$1,000,000 TOTAL: \$3,728,000
Prin. Invest. NASA Tech. Officer CASE Category
 G SERA HQ/F E PEWARANDA 99-Multi-Discip

NCA 2-717 Texas A&M University 7660
 PREDICTIONS OF CONSTRAINT EFFECTS ON ELASTIC-PLASTIC FRACTURE IN WELDED STRUCTURES
Period Obligations
 05/21/1992-10/14/1994 FY94: \$0 TOTAL: \$78,815
Prin. Invest. NASA Tech. Officer CASE Category
 T L ANDERSON ARC/T L PANONTIN 46-Mech Engr

NCC 2-742 Texas A&M University 7661
 INTERMITTENT FLOW VISUALIZATION SYSTEM: PROTOTYPE DESIGN
Period Obligations
 12/18/1991-12/30/1994 FY94: \$0 TOTAL: \$99,936
Prin. Invest. NASA Tech. Officer CASE Category
 D T WARD ARC/J H DEL FRATE 41-Aero Engr
 ARC/R E CURRY

NCC 2-770 Texas A&M University 7662
 COORDINATED SCHEDULING FOR DYNAMIC REAL-TIME SYSTEMS
Period Obligations
 08/19/1992-07/14/1993 FY94: \$0 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
 W WEIZHAO ARC/A GOFOZTH 22-Computer Science
 S NATARAIAAN ARC/Y K LIU

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NCC 2-791 Texas A&M University 7663
A PARALLEL ADA ATRANSLATION SYSTEM FOR MASIVELY P
ARALLEL COMPUTERS
Period *Obligations*
04/20/1993-08/31/1994 FY94: \$0 TOTAL: \$99,996
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A VOLZ ARC/A GOFORTH 22-Computer Science
ARC/Y K LIU

NGT 00-030-032 Texas A&M University 7664
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
11/16/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W M CHILDRESS HQ/G ASRAR 39-Env Sci, NEC

NGT 00-030-243 Texas A&M University 7665
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
09/13/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H STEWART HQ/R A SCHIFFER 33-Oceanography
HQ/G ASRAR

NGT 00-050-380 Texas A&M University 7666
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/23/1988-12/31/1992 FY94: \$0 TOTAL: \$80,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J POSTON HQ/F C OWENS 13-Physics

NGT 00-050-595 Texas A&M University 7667
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/27/1990-09/02/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F BEST HQ/F C OWENS 45-Elec Engr

NGT 00-050-690 Texas A&M University 7668
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
01/31/1991-09/30/1994 FY94: \$16,500 TOTAL: \$82,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E RYKIEL HQ/F C OWENS 51-Biological Sci

NGT 00-050-733 Texas A&M University 7669
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/25/1991-08/31/1995 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A PARLOS HQ/F C OWENS 49-Engr, NEC

NGT 00-050-738 Texas A&M University 7670
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/03/1991-08/31/1995 FY94: \$22,000 TOTAL: \$88,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J YEN HQ/F C OWENS 22-Computer Science

NGT 00-050-837 Texas A&M University 7671
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/12/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G YEN HQ/F C OWENS 22-Computer Science

NGT 00-051-185 Texas A&M University 7672
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/30/1993-08/31/1996 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K P BOWMAN GSFC/M BURRELL 11-Astronomy

NGT 00-051-229 Texas A&M University 7673
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/08/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L R HOSSNER JSC/S GOLDSTEIN 55-Agriculture Sci

NGT 00-051-232 Texas A&M University 7674
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
09/08/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J S YAGOOBI JSC/S GOLDSTEIN 46-Mech Engr

NGT 00-051-244 Texas A&M University 7675
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/29/1994-08/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J ANDREWS LERC/F MONTEGANI 46-Mech Engr

NGT 00-051-337 Texas A&M University 7676
GRADUATE STUDENT RESEARCHER PROGRAM
Period *Obligations*
08/22/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M B HALL ARC/M MOORE 12-Chemistry

NGT 00-070-185 Texas A&M University 7677
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
09/05/1990-08/31/1994 FY94: \$0 TOTAL: \$88,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A G PARLOS HQ/F C OWENS 49-Engr, NEC

NGT 00-070-221 Texas A&M University 7678
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/26/1991-12/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P N ROSCHKE HQ/F C OWENS 44-Civil Engr

NGT 00-070-248 Texas A&M University 7679
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
05/29/1992-05/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F R BEST JSC/S GOLDSTEIN 49-Engr, NEC

NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)

NGT 00-070-304 Texas A&M University 7680
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations
05/28/1993-05/31/1996	FY94: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
K CHANG	HQ/D K RUSSELL

 TOTAL: \$44,000
CASE Category
 45-Elec Engr

NGT 00-070-387 Texas A&M University 7681
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations
08/26/1994-06/30/1995	FY94: \$21,200
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
M DREW	HQ/D RUSSELL

 TOTAL: \$21,200
CASE Category
 39-Env Sci, NEC

NGT 00-090-128 Texas A&M University 7682
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
09/26/1992-08/14/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W D TURNER	HQ/D K RUSSELL

 TOTAL: \$24,000
CASE Category
 99-Multi-Discip

NGT 00-090-129 Texas A&M University 7683
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
09/24/1992-08/14/1994	FY94: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W D TURNER	HQ/D K RUSSELL

 TOTAL: \$24,000
CASE Category
 99-Multi-Discip

NGT 00-090-168 Texas A&M University 7684
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
08/27/1993-08/14/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W D TURNER	HQ/D RUSSELL

 TOTAL: \$0
CASE Category
 99-Multi-Discip

NGT 00-090-169 Texas A&M University 7685
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
09/09/1993-08/14/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W D TURNER	HQ/D K RUSSELL

 TOTAL: \$12,000
CASE Category
 99-Multi-Discip

NGT 00-090-190 Texas A&M University 7686
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
08/27/1993-08/14/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W D TURNER	HQ/D RUSSELL

 TOTAL: \$12,000
CASE Category
 99-Multi-Discip

NGT 00-090-191 Texas A&M University 7687
 UNDERGRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
08/27/1993-08/14/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W D TURNER	HQ/D K RUSSELL

 TOTAL: \$12,000
CASE Category
 99-Multi-Discip

NGT 00-090-217 Texas A&M University 7688
 UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

Period	Obligations
09/23/1993-08/14/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W D TURNER	HQ/D K RUSSELL

 TOTAL: \$12,000
CASE Category
 99-Multi-Discip

NGT 00-090-218 Texas A&M University 7689
 UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM

Period	Obligations
09/23/1993-08/14/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W D TURNER	HQ/D K RUSSELL

 TOTAL: \$12,000
CASE Category
 99-Multi-Discip

NGT44-1800 Texas A&M University 7690
 NASA ASEE SUMMER FACULTY FELLOWSHIP PROGRAM

Period	Obligations
01/01/1980-04/30/1995	FY94: \$102,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
W A HYMAN	HQ/A S MCGEE
	HQ/E T SCHWARTZ

 TOTAL: \$2,571,550
CASE Category
 49-Engr, NEC

NAG 3-1256 Texas A&M University System 7691
 HEAT TRANSFER AND BOUNDARY LAYER TRANSITION UNDER TU
 RBOMACHINERY FLOW CONDITIONS

Period	Obligations
03/12/1991-02/24/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
T M SCHOEIRI	LERC/B L COMPOLI
	LERC/R J SIMONEAU

 TOTAL: \$113,100
CASE Category
 46-Mech Engr

NAG 9-682 Texas A&M University-Kingsville 7692
 MINORITY EDUCATION PROGRAM K-12 OUTREACH EFFORTS

Period	Obligations
04/02/1993-04/14/1995	FY94: \$75,542
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
J L KIMBALL	JSC/L M ARMENDARIZ

 TOTAL: \$140,416
CASE Category
 79-Soc Sci, NEC

NAG 9-611 Texas College of Osteopathic Medicine 7693
 ALTERATIONS IN HUMAN BARORECEPTOR

Period	Obligations
05/15/1992-11/01/1994	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
P B RAVEN	JSC/S M FORTNEY
	JSC/J B CHARLES

 TOTAL: \$118,999
CASE Category
 56-Medical Sciences

NGT 00-050-751 Texas College of Osteopathic Medicine 7694
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM

Period	Obligations
09/19/1991-08/31/1993	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
P B RAVEN	HQ/F C OWENS

 TOTAL: \$44,000
CASE Category
 56-Medical Sciences

NAG 8-818 Texas Southern University 7695
 JOVE PILOT RESEARCH STUDY

Period	Obligations
03/23/1990-08/28/1995	FY94: \$0
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
S A ARYA	MSFC/C R CHAPPELL
	MSFC/N F SIX

 TOTAL: \$86,842
CASE Category
 31-Atmos Sci

NAG 9-299 Texas Southern University 7696
 PREPARATION AND STUDY OF TITANIUM, ZIRCONIUM AND HAFNIUM
 COMPLEXES

Period	Obligations
06/01/1988-04/01/1995	FY94: \$65,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>
B L WILSON	JSC/D S MCKAY

 TOTAL: \$398,043
CASE Category
 12-Chemistry

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 9-325 Texas Southern University INTERNATIONAL FOOD PATTERNS FOR SPACE <i>Period</i> 09/01/1988-02/01/1995 <i>Prin. Invest.</i> S M AHMED <i>Obligations</i> FY94: \$0 NASA Tech. Officer JSC/C T BOURLAND JSC/R R RITZ TOTAL: \$360,468 CASE Category 59-Life Sci, NEC	NAG 2-878 Texas Tech University INVESTIGATIONS OF BACTERIORHODOPSIN FILMS FOR OPTI CAL SIGNAL PROCESSING AND DATA STORAGE <i>Period</i> 01/07/1994-01/14/1995 <i>Prin. Invest.</i> J F WALKUP D J MEHRL <i>Obligations</i> FY94: \$65,000 NASA Tech. Officer ARC/C K GARY ARC/M B REID TOTAL: \$65,000 CASE Category 45-Elec Engr
NAG 9-423 Texas Southern University EXAMINATION OF IONIC SPECIES IN SOLUTION OF SIMULATED LUNAR REGOLITH AND SELECTED SOLVENTS <i>Period</i> 04/12/1990-10/01/1995 <i>Prin. Invest.</i> R WILSON <i>Obligations</i> FY94: \$125,000 NASA Tech. Officer JSC/D HENNINGER TOTAL: \$489,550 CASE Category 47-Materials Engr	NAG 2-899 Texas Tech University STUDENT SUPPORT FOR RESEARCH IN HIERARCHICAL CONTR OL AND TRAJECTORY PLANNING <i>Period</i> 01/01/1994-12/31/1994 <i>Prin. Invest.</i> C F MARTIN <i>Obligations</i> FY94: \$34,999 NASA Tech. Officer ARC/G MEYER TOTAL: \$34,999 CASE Category 49-Engr, NEC
NAG 9-456 Texas Southern University CAREERS IN SCIENCE <i>Period</i> 07/02/1990-08/31/1995 <i>Prin. Invest.</i> W W BARNETT <i>Obligations</i> FY94: \$87,286 NASA Tech. Officer JSC/G JOHNSON TOTAL: \$463,467 CASE Category 76-Sociology	NAG 2-902 Texas Tech University HIERARCHICAL CONTROL AND TRAJECTORY PLANNING <i>Period</i> 05/13/1994-12/31/1994 <i>Prin. Invest.</i> C F MARTIN <i>Obligations</i> FY94: \$35,000 NASA Tech. Officer ARC/G MEYER TOTAL: \$35,000 CASE Category 41-Aero Engr
NAG 9-712 Texas Southern University PHYROSAXINS IN PLANT DISEASE DEVELOPMENT IN HYDRO PHONICS <i>Period</i> 09/22/1993-08/31/1995 <i>Prin. Invest.</i> O A JEJELOWO <i>Obligations</i> FY94: \$146,650 NASA Tech. Officer JSC/D BARTA TOTAL: \$246,650 CASE Category 55-Agriculture Sci	NAG 3-1172 Texas Tech University ARCJET ELECTRODE DEGRADATION RESEARCH <i>Period</i> 05/10/1990-06/14/1995 <i>Prin. Invest.</i> E A O'HAIR M KRISTIANSEN L L HATFIELD <i>Obligations</i> FY94: \$167,640 NASA Tech. Officer LERC/F M CURRAN LERC/T W HAAG TOTAL: \$829,880 CASE Category 42-Astro Engr
NAG 9-721 Texas Southern University SUMMER FACULTY FELLOWS RECRUITMENT OF AFRICAN AMER ICANS IN SCIENCE AND ENGINEERING FOR ASSIGNMENT <i>Period</i> 10/27/1993-05/31/1994 <i>Prin. Invest.</i> L HYMAN <i>Obligations</i> FY94: \$37,000 NASA Tech. Officer JSC/J ATKINSON JR. TOTAL: \$37,000 CASE Category 99-Multi-Discip	NAG 3-1672 Texas Tech University ELECTRICAL INSULATORS AND HIGH VOLTAGE DEVICES IN A VACUUM ENVIRONMENT <i>Period</i> 09/28/1994-09/27/1995 <i>Prin. Invest.</i> M KRISTIANSEN <i>Obligations</i> FY94: \$75,000 NASA Tech. Officer LERC/E J PENCIL TOTAL: \$75,000 CASE Category 45-Elec Engr
NAG 9-765 Texas Southern University SELECTED COMPLEX IONS AND LIGANDS/SIMULATED RIGOLITH AND HYDROPONIC SYSTEMS <i>Period</i> 09/19/1994-10/01/1995 <i>Prin. Invest.</i> R F WILSON <i>Obligations</i> FY94: \$125,000 NASA Tech. Officer JSC/D HENNINGER TOTAL: \$125,000 CASE Category 54-Env Biology	NAG 9-673 Texas Tech University INTEGRATED ADAPTIVE FUZZY SYSTEM FOR IDENTIFICATION AND CONTROL OF SPACE OBJECTS <i>Period</i> 03/02/1993-10/01/1994 <i>Prin. Invest.</i> S MITRA <i>Obligations</i> FY94: \$0 NASA Tech. Officer JSC/J A VILLARREAL TOTAL: \$60,882 CASE Category 45-Elec Engr
NAGW 3060 Texas Southmost College SOUTH TEXAS SCIENCE OUTREACH PROGRAM <i>Period</i> 05/04/1992-05/14/1995 <i>Prin. Invest.</i> L V LOF P GOMEZ <i>Obligations</i> FY94: \$135,332 NASA Tech. Officer JSC/L ARMENDARIZ HQ/B L WHITE TOTAL: \$325,820 CASE Category 99-Multi-Discip	NGT 00-050-635 Texas Tech University NASA GRADUATE STUDENT RESEARCHERS PROGRAM <i>Period</i> 08/30/1990-08/31/1993 <i>Prin. Invest.</i> L L HATFIELD <i>Obligations</i> FY94: \$0 NASA Tech. Officer HQ/F C OWENS TOTAL: \$66,000 CASE Category 13-Physics
NAG 1-1510 Texas Tech University ELECTROMAGNETIC COMPATIBILITY TESTING STUDIES <i>Period</i> 05/28/1993-05/31/1995 <i>Prin. Invest.</i> T F TROST <i>Obligations</i> FY94: \$54,652 NASA Tech. Officer LARC/F L PITTS TOTAL: \$124,652 CASE Category 45-Elec Engr	NAG 9-579 Texas Woman's University DEVELOPMENT OF STRENGTH AND ANTHROPOMETRIC DATA BASE FOR COMPUTER MODELING/EVA UPPER EXTREMITY TASKS <i>Period</i> 04/03/1992-07/01/1994 <i>Prin. Invest.</i> S M HASSON <i>Obligations</i> FY94: NASA Tech. Officer JSC/B WOOLFORD TOTAL: \$60,753 CASE Category 56-Medical Sciences

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 9-738			
Texas Woman's University		7713	
COMPUTER MODELING OF HAND STRENGTH AND POSITION DURING GRASPING			
<i>Period</i>	<i>Obligations</i>		
06/01/1994-07/01/1995	FY94: \$63,177	TOTAL: \$63,177	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S HASSON	JSC/J MAIDA	59-Life Sci, NEC	
NAG 9-516			
Univ Houston		7721	
CLINICAL VERIFICATION OF IMAGE WARPING AS POTENTIAL AID FOR VISUALLY HANDICAPPED			
<i>Period</i>	<i>Obligations</i>		
05/01/1991-03/01/1995	FY94: \$21,000	TOTAL: \$46,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D S LOSHIN	JSC/R JUDAY	56-Medical Sciences	
NAG 3-510			
Univ Houston		7714	
2 PHASE FLOW in ZERO GRAVITY			
<i>Period</i>	<i>Obligations</i>		
12/21/1983-12/02/1994	FY94: \$170,716	TOTAL: \$1,050,879	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A E DUKLER	LERC/J B MCQUILLEN	43-Chem Engr	
NAG 5-688			
Univ Houston		7715	
COORDINATED IMAGING STUDY OF THE X-RAY AND VISIBLE AURORA BOREALIS			
<i>Period</i>	<i>Obligations</i>		
02/24/1992-08/31/1994	FY94: \$0	TOTAL: \$30,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E A BERING	GSFC/L J EARLY	13-Physics	
	GSFC/R H PLESS		
NAG 9-213			
Univ Houston		7716	
HIGH ALTITUDE OZONE WITH ROCKET PAYLOAD			
<i>Period</i>	<i>Obligations</i>		
01/01/1987-04/01/1993	FY94:	TOTAL: \$117,814	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W R SHELDON	JSC/D E ROBBINS	31-Atmos Sci	
NAG 9-365			
Univ Houston		7717	
MINERAL CHEMISTRY OF HED METEORITES			
<i>Period</i>	<i>Obligations</i>		
06/01/1989-06/01/1994	FY94: \$0	TOTAL: \$174,581	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A M REID	JSC/I D BROWNE	32-Geological Sci	
NAG 9-380			
Univ Houston		7718	
STATE-SPACE SELF-TUNER FOR ON-LINE ADAPTIVE CONTROL			
<i>Period</i>	<i>Obligations</i>		
06/01/1989-06/01/1994	FY94: \$0	TOTAL: \$295,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L S SHIEH	JSC/J W SUNKEL	45-Elec Engr	
NAG 9-405			
Univ Houston		7719	
DEVELOPMENT ENVIRONMENT FOR INTELLIGENT TRAINING SYSTEMS			
<i>Period</i>	<i>Obligations</i>		
09/15/1989-08/31/1993	FY94: \$0	TOTAL: \$263,859	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R B LOFTIN	JSC/R T SAVEDY	22-Computer Science	
NAG 9-441			
Univ Houston		7720	
HIGH TC SUPERCONDUCTING ANTENNAS			
<i>Period</i>	<i>Obligations</i>		
06/01/1990-12/01/1993	FY94:	TOTAL: \$56,329	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J C WOLFE	JSC/P NGO	45-Elec Engr	
J L WOSIK			
D ECONOMOU			
NAG 9-532			
Univ Houston		7722	
DETERMINATION OF THERMAL CONDUCTIVITY OF INSULATING MATERIALS			
<i>Period</i>	<i>Obligations</i>		
06/12/1991-07/01/1993	FY94: \$0	TOTAL: \$30,776	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L C WITTE	JSC/P PETETE	46-Mech Engr	
NAG 9-544			
Univ Houston		7723	
SOFTWARE FOR AUTONOMOUS CONTROL OF AEROSPACE POWER SYSTEMS			
<i>Period</i>	<i>Obligations</i>		
07/29/1991-11/01/1994	FY94: \$0	TOTAL: \$49,716	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B H JANSEN	JSC/J BURKE	41-Aero Engr	
NAG 9-546			
Univ Houston		7724	
STUDY OF TWO PHASE FLOW			
<i>Period</i>	<i>Obligations</i>		
09/01/1991-03/01/1993	FY94:	TOTAL: \$4,940	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L C WITTE	JSC/E UNGAR	46-Mech Engr	
NAG 9-555			
Univ Houston		7725	
AN EVALUATION OF TRAINING EFFECTIVENESS OF INTELLIGENT TUTORING SYSTEM			
<i>Period</i>	<i>Obligations</i>		
09/30/1991-08/31/1993	FY94: \$0	TOTAL: \$24,350	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D S JOHNSON	JSC/R T SAVEDY	69-Psych, NEC	
NAG 9-562			
Univ Houston		7726	
LITERACY TUTOR INTELLIGENT COMPUTER-AIDED TRAINING SYSTEM			
<i>Period</i>	<i>Obligations</i>		
11/19/1991-09/01/1994	FY94: \$34,500	TOTAL: \$176,767	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J B WILLIS	JSC/J A VILLARREAL	29-Math/Computer, NEC	
NAG 9-578			
Univ Houston		7727	
SELF ORGANIZATION VIA ACTIVE EXPLORATION IN ROBOTIC APPLICATION			
<i>Period</i>	<i>Obligations</i>		
04/07/1992-02/28/1994	FY94:	TOTAL: \$47,472	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H A OGMEN	JSC/H NGUYEN	45-Elec Engr	
NAG 9-592			
Univ Houston		7728	
AEROSPACE DEVICES FROM MAGNET REPLICAS			
<i>Period</i>	<i>Obligations</i>		
04/27/1992-05/01/1994	FY94: \$0	TOTAL: \$125,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R WEINSTEIN	JSC/G D ARNDT	13-Physics	

NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)

NAG 9-593 Univ Houston 7729
HIGH TEMPERATURE SUPERCONDUCTING ANTENNA ARRAY FOR
FLIGHT COMMUNICATIONS EXPERIMENT
Period Obligations
04/27/1992-05/01/1993 FY94: \$0 TOTAL: \$59,997
Prin. Invest. NASA Tech. Officer CASE Category
J T WILLIAMS JSC/P NGO 45-Elec Engr
S A LONG
J C WOLFE

NAG 9-632 Univ Houston 7730
SHOCK PHENOMENA IN METEORITES
Period Obligations
09/01/1992-08/31/1994 FY94: \$0 TOTAL: \$24,889
Prin. Invest. NASA Tech. Officer CASE Category
A REID JSC/F HORZ 32-Geological Sci

NAG 9-657 Univ Houston 7731
SCIENTIFIC AND TECHNICAL INSTRUCTIONAL SUPPORT FOC USING
ON UNDERREPRESENTED MINORITIES
Period Obligations
12/04/1992-05/31/1995 FY94: \$74,820 TOTAL: \$141,800
Prin. Invest. NASA Tech. Officer CASE Category
R A ALO JSC/C M HOSKINS 29-Math/Computer, NEC

NAG 9-658 Univ Houston 7732
HOUSTON BRIDGE PROGRAM
Period Obligations
12/14/1992-08/01/1995 FY94: \$81,189 TOTAL: \$110,889
Prin. Invest. NASA Tech. Officer CASE Category
J M BENNETT JSC/G JOHNSON 99-Multi-Discip

NAG 9-662 Univ Houston 7733
INTERNATIONAL DESIGN FOR EXTREME ENVIRONMENTS ASSE
MBLY CONFERENCE
Period Obligations
01/27/1993-12/31/1994 FY94: \$0 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
L BELL JSC/K HENDERSON 44-Civil Engr

NAG 9-672 Univ Houston 7734
ADVANCED SIMULATOR FOR PARTIAL/ZERO GRAVITY
Period Obligations
03/03/1993-02/01/1994 FY94: \$0 TOTAL: \$45,157
Prin. Invest. NASA Tech. Officer CASE Category
P NANUA JSC/L OTHON 46-Mech Engr

NAG 9-674 Univ Houston 7735
STUDIES OF GAS LIQUID SLUG FLOW AT REDUCED GRAVITY
CONDITIONS
Period Obligations
03/03/1993-09/01/1994 FY94: \$0 TOTAL: \$56,178
Prin. Invest. NASA Tech. Officer CASE Category
R METCALF JSC/K MILLER 43-Chem Engr

NAG 9-713 Univ Houston 7736
DEVELOPMENT ADVANCED TRAINING TECHNOLOGIES
Period Obligations
09/30/1993-08/31/1995 FY94: \$3,800 TOTAL: \$215,893
Prin. Invest. NASA Tech. Officer CASE Category
R B LOFTIN JSC/C CULBERT 22-Computer Science

NAG 9-741 Univ Houston 7737
OPERATION HIGH TEMPERATURE SUPERCONDUCTING DEVICES IN
SPACE WITHOUT CRYOGENS
Period Obligations
05/31/1994-06/01/1995 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. NASA Tech. Officer CASE Category
P C CHU JSC/K KRISHNEN 13-Physics

NAG 9-742 Univ Houston 7738
PHOTO IONIZATION ION MOBILITY SPECTROMETER FOR AIR
CONTAMINATION MONITORING
Period Obligations
06/06/1994-06/01/1995 FY94: \$58,872 TOTAL: \$58,872
Prin. Invest. NASA Tech. Officer CASE Category
W E WENTWORTH JSC/J T JAMES 19-Phys Sci, NEC

NAG 9-743 Univ Houston 7739
SUPERCONDUCTING MAGNETS SPACE APPLICATIONS
Period Obligations
06/28/1994-05/31/1995 FY94: \$63,000 TOTAL: \$63,000
Prin. Invest. NASA Tech. Officer CASE Category
R WEINSTEIN JSC/G D ARNDT 13-Physics

NAG 9-746 Univ Houston 7740
ROBUST OPTIMAL PWM AND PAM CONTROLLERS FOR UNCERTAIN
AEROSPACE SYSTEMS
Period Obligations
06/09/1994-04/01/1995 FY94: \$58,955 TOTAL: \$58,955
Prin. Invest. NASA Tech. Officer CASE Category
L S SHIEH JSC/J W SUNKEL 45-Elec Engr

NAG 9-759 Univ Houston 7741
CHARACTERIZATION OF PLASMA DISCHARGE IN MAGNETIC T
ANDEM MIRROR
Period Obligations
08/15/1994-08/11/1995 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. NASA Tech. Officer CASE Category
F CHANG-DIAZ JSC/K KRISHNEN 42-Astro Engr

NAGW 977 Univ Houston 7742
ESTAB CENTER FOR COMM DEVEL OF SPACE
Period Obligations
09/01/1986-10/14/1994 FY94: \$4,800,000 TOTAL: \$29,807,378
Prin. Invest. NASA Tech. Officer CASE Category
C W CHU HQ/W A ORAN 51-Biological Sci
J T NORRIS HQ/A VILLAMIL

NAGW 2108 Univ Houston 7743
IBOSOMAL RNA EVOLUTION AND MICROBIAL PHYLOGENY
Period Obligations
06/07/1990-11/30/1995 FY94: \$69,000 TOTAL: \$335,000
Prin. Invest. NASA Tech. Officer CASE Category
G E FOX HQ/J D RUMMEL 51-Biological Sci

NAGW 2788 Univ Houston 7744
ORGANIC CHEMISTRY
Period Obligations
12/06/1991-09/30/1993 FY94: \$0 TOTAL: \$145,411
Prin. Invest. NASA Tech. Officer CASE Category
J ORO HQ/J D RUMMEL 12-Chemistry

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAGW 3191			Univ Houston	7745
NAGW-3191/UNIV HOUSTON/NASA SPACE LIFE SCIENCES TRAINING PROGRAM FEASIBILITY STUDY				
<i>Period</i>		<i>Obligations</i>		
09/17/1992-07/31/1994	FY94: \$0	TOTAL: \$5,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
I WOLINSKY	HQ/G R COULTER	59-Life Sci, NEC		
NAGW 3623			Univ Houston	7746
EUCRITES, HOWARDITES AND CV CHRONDRITES				
<i>Period</i>		<i>Obligations</i>		
05/28/1993-05/31/1994	FY94: \$0	TOTAL: \$33,139		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
A REID	HQ/J BOYCE	32-Geological Sci		
NCC 2-801			Univ Houston	7747
EFFECTS OF DIETARY SALT ON BONE IN MATURE RATS DURING A FLIGHT SIMULATION MODEL				
<i>Period</i>		<i>Obligations</i>		
05/20/1993-08/31/1993	FY94: \$0	TOTAL: \$18,892		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
S B ARNAUD	ARC/R E GRINDELAND	59-Life Sci, NEC		
I WOLINSKY	ARC/S B ARNAUD			
NGT 00-050-590			Univ Houston	7748
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
09/11/1990-08/31/1993	FY94:	TOTAL: \$64,220		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
L C WITTE	HQ/F C OWENS	46-Mech Engr		
NGT 00-050-875			Univ Houston	7749
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
07/24/1992-07/31/1995	FY94: \$22,000	TOTAL: \$66,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
F HUSSAIN	JSC/S GOLDSTEIN	46-Mech Engr		
NGT 00-051-022			Univ Houston	7750
GRADUATE STUDENT RESEARCHERS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
05/14/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
F HUSSAIN	ARC/M MOORE	46-Mech Engr		
NGT 00-051-085			Univ Houston	7751
GRADUATE STUDENT RESEARCHERS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
06/01/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
G E FOX	HQ/D HOLLAND	12-Chemistry		
NGT 00-051-159			Univ Houston	7752
GRADUATE STUDENT RESEARCHERS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
07/26/1993-06/30/1994	FY94: \$0	TOTAL: \$22,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
A E DUKLER	LERC/F MONTAGANI	43-Chem Engr		
NGT 00-070-250			Univ Houston	7753
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
05/08/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T GOLDING	HQ/D K RUSSELL	13-Physics		
NGT 00-090-176			Univ Houston	7754
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM				
<i>Period</i>		<i>Obligations</i>		
08/27/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
G F PASKUSZ	HQ/D RUSSELL	99-Multi-Discip		
NGT 00-090-245			Univ Houston	7755
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)				
<i>Period</i>		<i>Obligations</i>		
05/16/1994-08/14/1996	FY94: \$12,000	TOTAL: \$12,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
G F PASKUSZ	HQ/D K RUSSELL	99-Multi-Discip		
NGT44-5803			Univ Houston	7756
TRAINING GRANT FOR CONDUCTING SUMMER FACULTY FELLOWSHIP PROGRAM				
<i>Period</i>		<i>Obligations</i>		
01/01/1984-03/31/1995	FY94: \$547,970	TOTAL: \$2,370,913		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
R B BANNEROT	HQ/A S MCGEE	49-Engr, NEC		
	HQ/E T SCHWARTZ			
NAG 2-26			Univ of Texas Medical Branch - Galveston	7757
CONTROL OTOLITCHIN MECHANISMS IN NON-HUMAN PRIMATE				
<i>Period</i>		<i>Obligations</i>		
01/01/1980-05/30/1995	FY94: \$44,430	TOTAL: \$1,015,958		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
A A PERACHIO	ARC/M D ROSS	51-Biological Sci		
M J CARRETA	ARC/M L CORCORAN			
G A KEVETTE				
NAG 2-260			Univ of Texas Medical Branch - Galveston	7758
THE IDENTIFICATION AND PHARMACOLOGY OF NEUROTRANSMITTERS IN THE VESTIBULAR NUCLEI				
<i>Period</i>		<i>Obligations</i>		
12/01/1987-01/31/1993	FY94: \$0	TOTAL: \$563,825		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J P GALLAGHER	ARC/N G DAUNTON	51-Biological Sci		
	ARC/M L CORCORAN			
NAG 2-446			Univ of Texas Medical Branch - Galveston	7759
STUDIES OF VESTIBULAR PRIMARY AFFERENTS IN NORMAL, HYPER- AND HYPOGRAVITY				
<i>Period</i>		<i>Obligations</i>		
09/01/1988-03/31/1995	FY94: \$50,000	TOTAL: \$1,107,657		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M J CORREIA	ARC/J P CONNOLLY	51-Biological Sci		
A A PERACHIO	ARC/R W BALLARD			

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 2-780 Univ of Texas Medical Branch - 7760
Galveston
BASIC GRAVITATIONAL REFLEXES IN THE LARVAL FROG
Period Obligations
04/20/1992-12/31/1994 FY94: \$58,200 TOTAL: \$176,400
Prin. Invest. NASA Tech. Officer CASE Category
S L COCHRAN ARC/M L CORCORAN 51-Biological Sci
ARC/C E WADE

NAG 9-581 Univ of Texas Medical Branch - 7761
Galveston
INACTIVITY-RELATED MUSCLE ATROPHIN IN MAN
Period Obligations
04/08/1992-07/01/1994 FY94: \$0 TOTAL: \$173,875
Prin. Invest. NASA Tech. Officer CASE Category
C A STUART JSC/R SAUER 56-Medical Sciences
JSC/H W LANE

NAGW 4032 Univ of Texas Medical Branch - 7762
Galveston
COUNTERMEASURES FOR MICROGRAVITY - INDUCED MUSCLE ATROPHY
Period Obligations
06/06/1994-04/14/1995 FY94: \$190,000 TOTAL: \$190,000
Prin. Invest. NASA Tech. Officer CASE Category
C A STUART HQ/F M SULZMAN 56-Medical Sciences

NAS 9-18967 Univ of Texas Medical Branch - 7763
Galveston
PROTEIN TURNOVER INVESTIGATIONS
Period Obligations
09/23/1993-01/01/1995 FY94: \$50,000 TOTAL: \$100,000
Prin. Invest. NASA Tech. Officer CASE Category
R WOLFE JSC/H LANE 51-Biological Sci

NGT 00-050-736 Univ of Texas Medical Branch - 7764
Galveston
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/02/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R M DENNEY HQ/F C OWENS 56-Medical Sciences

NGT 00-050-748 Univ of Texas Medical Branch - 7765
Galveston
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
06/26/1991-09/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A A PERACHIO HQ/F C OWENS 56-Medical Sciences

NAG 2-730 Univ of Texas-Hlth Sci Ctr-San Antonio 7766
EARLY DEVELOPMENT OF A GRAVITY-SENSING ORGAN IN M
ICROGRAVITY
Period Obligations
08/20/1991-09/30/1994 FY94: \$160,506 TOTAL: \$427,379
Prin. Invest. NASA Tech. Officer CASE Category
M L WIDERHOLD ARC/C M WINGET 51-Biological Sci
ARC

NAG 9-687 Univ of Texas-Hlth Sci Ctr-San Antonio 7767
HUMAN TISSUE MODELING
Period Obligations
04/30/1993-08/01/1994 FY94: \$0 TOTAL: \$75,000
Prin. Invest. NASA Tech. Officer CASE Category
M P MOYER JSC/G SPAULDING 56-Medical Sciences

NAG 9-551 Univ of Texas-Pan American 7768
GRAPHIC NETWORK DIAGRAM FOR LARGE INFORMATION SRVC
Period Obligations
09/16/1991-09/14/1995 FY94: \$137,563 TOTAL: \$265,053
Prin. Invest. NASA Tech. Officer CASE Category
R H FOWLER JSC/J D ATKINSON 31-Atmos Sci

NAG 9-552 Univ of Texas-Pan American 7769
CORTICAL ACTIVATION PATTERNS IN PEOPLE DURING COMPUTER GENERATED SIMULATIONS
Period Obligations
09/16/1991-09/15/1994 FY94: \$110,218 TOTAL: \$256,464
Prin. Invest. NASA Tech. Officer CASE Category
V I ALVARADO JSC/J D ATKINSON 31-Atmos Sci

NAG 9-553 Univ of Texas-Pan American 7770
DIFFERENTIAL EQUATIONS WITH PIECEWISE CONTINUOUS ARGUMENT AND THEIR APPLICATION
Period Obligations
09/16/1991-09/14/1995 FY94: \$152,829 TOTAL: \$292,003
Prin. Invest. NASA Tech. Officer CASE Category
J WIENER JSC/J D ATKINSON 31-Atmos Sci

NAG 9-767 Univ of Texas-Pan American 7771
CONCATENATED CODING USING TRELIS CODED MODULATION
Period Obligations
09/27/1994-08/31/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. NASA Tech. Officer CASE Category
S E DAVIDSON JSC/N G ROBERTSON 22-Computer Science

NGT 00-090-043 Univ of Texas-Pan American 7772
UNDERGRADUATE RESEARCHERS PROGRAM
Period Obligations
08/22/1991-08/31/1994 FY94: \$12,000 TOTAL: \$124,942
Prin. Invest. NASA Tech. Officer CASE Category
W SHOCKLEY HQ/B WHITE 49-Engr, NEC

NGT 00-090-101 Univ of Texas-Pan American 7773
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/12/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
W SHOCKLEY HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-102 Univ of Texas-Pan American 7774
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/12/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. NASA Tech. Officer CASE Category
W SHOCKLEY HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-162 Univ of Texas-Pan American 7775
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/26/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
W C SHOCKLEY HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-163 Univ of Texas-Pan American 7776
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/26/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. NASA Tech. Officer CASE Category
W C SHOCKLEY HQ/D K RUSSELL 99-Multi-Discip

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NGT 00-090-164 Univ of Texas-Pan American 7777
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W C SHOCKLEY HQ/D RUSSELL 99-Multi-Discip

NAG 9-152 Univ of Texas, Health Sci Ctr-Dallas 7778
STUDY OF RENAL STONE FORMATION
Period *Obligations*
05/01/1986-05/01/1994 FY94: \$31,654 TOTAL: \$839,154
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C Y PAK JSC/P A WHITSON 56-Medical Sciences
M NICAR JSC/H W LANE

NAG 9-492 Univ of Texas, Health Sci Ctr-Dallas 7779
THREE DIMENSIONAL, ECHOCARDIOGRAPHY FOR VENTRICULAR GEOMETRY
Period *Obligations*
02/22/1991-11/01/1994 FY94: \$74,846 TOTAL: \$237,968
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C BUCKEY JSC/S M FORTNEY 56-Medical Sciences
JSC/J B CHARLES

NAGW 3582 Univ of Texas, Health Sci Ctr-Dallas 7780
MECHANISMS OF PHYSIOLOGICAL ADAPTATION TO MICROGRAVITY
Period *Obligations*
07/19/1993-05/31/1994 FY94: \$1,026,000 TOTAL: \$2,052,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C G BLOMQVIST HQ/R J WHITE 56-Medical Sciences

NAS 9-16044 Univ of Texas, Health Sci Ctr-Dallas 7781
LIFE SCI EXPER CARDIOVASCULAR ADAPT
Period *Obligations*
01/17/1980-10/01/1994 FY94: \$375,000 TOTAL: \$6,456,366
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G BLOMQVIST JSC/W YOUNG 56-Medical Sciences

NAS 9-18139 Univ of Texas, Health Sci Ctr-Dallas 7782
LIFE SCIENCES FLIGHT EXPERIMENT 'CARDIOVASCULAR REGULATION AT ZERO-G'
Period *Obligations*
09/01/1989-10/01/1994 FY94: \$132,302 TOTAL: \$1,562,800
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G BLOMQVIST JSC/C M BUNTIN 56-Medical Sciences

NAS 9-19190 Univ of Texas, Health Sci Ctr-Dallas 7783
DATA ARCHIVE SCIENTIFIC DEVELOPMENT
Period *Obligations*
08/11/1994-01/01/1995 FY94: \$56,531 TOTAL: \$56,531
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J BUCKEY JSC/J CARDENAS 56-Medical Sciences

NAS 9-19203 Univ of Texas, Health Sci Ctr-Dallas 7784
INTEGRATION OF NEURAL CARDIOVASCULAR CONTROL IN SP ACE
Period *Obligations*
09/29/1994-06/30/1995 FY94: \$75,000 TOTAL: \$75,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G BLOMQVIST JSC/S SAWYER 56-Medical Sciences

NAG 9-664 Univ. of Texas Md Anderson Cancer Center 7785
ANALYSIS AND PROMOTION OF LYMPHOCYTE LOCOMOTION THROUGH INTERCELLULAR MATRIX
Period *Obligations*
03/09/1993-11/01/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N R PELLIS JSC/G SPAULDING 56-Medical Sciences

NAG 2-239 Univ. of Texas-Hlth Science Ctr-Houston 7786
BIOCHEMICAL ADAPTATION OF ANTI-GRAVITY MUSCLE FIBERS TO DISUSE ATROPHY
Period *Obligations*
11/01/1987-09/30/1993 FY94: \$0 TOTAL: \$701,219
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F W BOOTH ARC/R E GRINDELAND 56-Medical Sciences

NAG 9-215 Univ. of Texas-Hlth Science Ctr-Houston 7787
PHYSIOLOGICAL EFFECTS OF VENOUS BUBBLES
Period *Obligations*
01/01/1987-08/01/1994 FY94: \$0 TOTAL: \$386,667
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B D BUTLER JSC/J M WALIGORA 56-Medical Sciences

NAG 9-335 Univ. of Texas-Hlth Science Ctr-Houston 7788
EVALUATE PHYSIOLOGIC CHANGES MICROGRAVITY
Period *Obligations*
01/01/1989-04/01/1994 FY94: \$0 TOTAL: \$909,787
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V SCHNEIDER JSC/S POOL 56-Medical Sciences

NAG 9-413 Univ. of Texas-Hlth Science Ctr-Houston 7789
DEVELOPMENT OF CORRELATIVE ELECTROPHYSIOLOGICAL MEASURES FOR STUDY OF ATTENTION AND MEMORY PROCESSING
Period *Obligations*
02/26/1990-09/01/1993 FY94: \$0 TOTAL: \$64,087
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J DEFRANCE JSC/F A KUTYNA 56-Medical Sciences

NAG 9-688 Univ. of Texas-Hlth Science Ctr-Houston 7790
PROPAGATION OF NORWALK VIRUS USING APPLIED MICROGRAVITY BIOTECHNOLOGY
Period *Obligations*
05/11/1993-06/01/1994 FY94: \$0 TOTAL: \$74,900
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P C JOHNSON JSC/T T GOODWIN 56-Medical Sciences

NAGW 3908 Univ. of Texas-Hlth Science Ctr-Houston 7791
NAGW-3908/B UNIV. TX HEALTH SCI CTR HOUSTON 'BIOCHEM. ADAPT. OF ANTI-GRAVITY MUSCLE ATROPHY' 12 MO
Period *Obligations*
03/31/1994-02/28/1995 FY94: \$86,793 TOTAL: \$86,793
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F W BOOTH HQ/F M SULZMAN 51-Biological Sci

NCC 2-423 Univ. of Texas-Hlth Science Ctr-Houston 7792
CHRONOGENESIS IN MICROMASS CULTURES OF EMBRYONIC LIMB MESENCHYME
Period *Obligations*
05/01/1986-03/31/1995 FY94: \$1,877 TOTAL: \$1,314,165
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P J DUKE ARC/C M WINGET 51-Biological Sci
ARC/R W BALLARD

NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)

NCC 2-876 Univ. of Texas-Hlth Science Ctr-Houston 7793
 ULTRASTRUCTURE AND IMMUNOHISTOCHEMICAL ANALYSES OF F
 ETAL MOUSE LONG BONES TO MICROGRAVITY ON
Period Obligations
 09/27/1994-06/30/1995 FY94: \$40,000 TOTAL: \$40,000
Prin Invest NASA Tech. Officer CASE Category
 P J DUKE ARC/C M WINGET 51-Biological Sci
 ARC/J C JAHNS

NCC 2-8001 Univ. of Texas-Hlth Science Ctr-Houston 7794
 AN AGREEMENT IMPLEMENTING THE INTERGOVERNMENTAL IN
 TERGOVERNMENTAL PERSONNEL ACT OF 1970
Period Obligations
 04/13/1994-04/30/1995 FY94: \$204,554 TOTAL: \$204,554
Prin Invest NASA Tech. Officer CASE Category
 V S SCHNEIDER ARC/P DYAL 59-Life Sci, NEC

NCC 9-20 Univ. of Texas-Hlth Science Ctr-Houston 7795
 HINDLIMB TISSUE GAS PHASE FORMATION IN RESPONSE TO
 SUSPENSION ADYRAMIA AND HYPIKINESIA
Period Obligations
 03/07/1991-01/01/1995 FY94: \$12,000 TOTAL: \$33,416
Prin Invest NASA Tech. Officer CASE Category
 B BUTLER JSC/M POWELL 56-Medical Sciences

NGT 00-050-900 Univ. of Texas-Hlth Science Ctr-Houston 7796
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
 05/29/1992-06/30/1993 FY94: \$0 TOTAL: \$22,000
Prin Invest NASA Tech. Officer CASE Category
 B D BUTLER HQ/J ALEXANDER 56-Medical Sciences

NAG 9-569 University of Houston - Clear Lake 7797
 COMMUNITY COLLEGE CIRRUCLUM DEBELOPMENT FOR AERO
 SPACE OPERATIONS TECHNICIANS PHASE 1
Period Obligations
 11/19/1991-08/01/1994 FY94: \$0 TOTAL: \$49,212
Prin Invest NASA Tech. Officer CASE Category
 G B FREEDMAN JSC/S H GOLDSTEIN 99-Multi-Discip

NAG 9-584 University of Houston - Clear Lake 7798
 INTEGRATED SCHEDULING TECHNIQUES FOR SPACE VEHICLE
 PROGRAMS
Period Obligations
 04/18/1992-05/01/1994 FY94: \$0 TOTAL: \$52,836
Prin Invest NASA Tech. Officer CASE Category
 S DAVARI JSC/P A MARTINEZ 22-Computer Science
 W ZHAO

NAG 9-660 University of Houston - Clear Lake 7799
 DEVELOPMENT OF TEXAS TECHNOLOGY TARGETING PROGRAM.
Period Obligations
 01/15/1993-01/01/1994 FY94: \$0 TOTAL: \$50,000
Prin Invest NASA Tech. Officer CASE Category
 P BISHOP JSC/K E HENDERSON 99-Multi-Discip

NAG 9-718 University of Houston - Clear Lake 7800
 COMPUTER IMAGE ANALYSIS OF ETCHED TRACKS FROM ION IZING
 RADIATION
Period Obligations
 09/30/1993-11/30/1994 FY94: \$15,400 TOTAL: \$15,400
Prin Invest NASA Tech. Officer CASE Category
 G BLANFORD JSC/S H GOLDSTEIN 11-Astronomy

NAG 9-731 University of Houston - Clear Lake 7801
 DEVELOPMENT/EVALUATION OF TEACHER TRAINING
 INSTITUTE/TNEMATIC SCIENCE
Period Obligations
 05/05/1994-01/01/1995 FY94: \$99,995 TOTAL: \$99,995
Prin Invest NASA Tech. Officer CASE Category
 R M JONES JSC/N G ROBERTSON 99-Multi-Discip

NAG 9-737 University of Houston - Clear Lake 7802
 SCHEDULING IN DISTRIBUTED REAL-TIME SYSTEMS
Period Obligations
 07/05/1994-07/30/1995 FY94: \$58,394 TOTAL: \$58,394
Prin Invest NASA Tech. Officer CASE Category
 T F LEIBFRIED JSC/D M PRUETT 22-Computer Science

NCC 9-16 University of Houston - Clear Lake 7803
 RESEARCH INSTITUTE FOR COMPUTING SYSTEMS
Period Obligations
 06/09/1986-06/30/1995 FY94: \$711,274 TOTAL: \$42,145,646
Prin Invest NASA Tech. Officer CASE Category
 E T DICKERSON JSC/R B MACDONALD 22-Computer Science
 A G HOUSTON JSC/J R GARMAN

NCC 9-30 University of Houston - Clear Lake 7804
 RESEARCH FOR COMPUTING AND INFORMATION SYSTEMS
Period Obligations
 08/08/1994-06/30/1995 FY94: \$2,113,800 TOTAL: \$2,113,800
Prin Invest NASA Tech. Officer CASE Category
 S L GERHART JSC/R T SAVELY 22-Computer Science

NGT 00-090-031 University of Houston - Clear Lake 7805
 TRAINING PROG RAM FOR THE STUDIES IN ENERGY AND SPACE
 TECHNOLOGY
Period Obligations
 05/10/1990-05/31/1994 FY94: \$0 TOTAL: \$588,427
Prin Invest NASA Tech. Officer CASE Category
 G SAWYER HQ/M S MARGOLIS 29-Math/Computer, NEC
 W MILLER

NAG 1-1468 University of North Texas 7806
 SCANNING TUNNELING MICROSCOPY STUDIES OF DIAMOND FILMS
 AND OPTOELECTRONIC MATERIALS - MY 1/3
Period Obligations
 01/29/1993-11/30/1994 FY94: \$72,107 TOTAL: \$147,100
Prin Invest NASA Tech. Officer CASE Category
 J M PEREZ LARC/J J SINGH 13-Physics

NAG 9-586 University of Texas - Arlington 7807
 ORBITAL DEBRIS SHIELDS FOR OBLIQUE HYPERVELOCITY IMPACT
Period Obligations
 04/15/1992-04/01/1994 FY94: TOTAL: \$59,340
Prin Invest NASA Tech. Officer CASE Category
 E P FAHRENTHOLD JSC/E L CHRISTENSEN 46-Mech Engr

NAGW 3091 University of Texas - Arlington 7808
 OPTIMIZED INVERSION FOR GEOPHYSICAL PARAMETERS FROM
 REMOTE SENSING DATA VIA MODELING AND NEURAL
Period Obligations
 05/29/1992-02/28/1995 FY94: \$100,000 TOTAL: \$300,000
Prin Invest NASA Tech. Officer CASE Category
 A K FUNG HQ/D E WICKLAND 39-Env Sci, NEC
 HQ/A C JANETOS

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAGW 3421 University of Texas - Arlington 7809
AN ADVANCED MODEL OF SOUL POLARIZED BIDIRECTIONAL
REFLECTANCE
Period Obligations
03/09/1993-12/31/1994 FY94: \$98,000 TOTAL: \$178,000
Prin. Invest. NASA Tech. Officer CASE Category
D P GIBBS HQ/K J RANSON 39-Env Sci, NEC
HQ/D E WICKLAND

NAGW 3714 University of Texas - Arlington 7810
NASA/UTA CENTER FOR HYPERSONIC RESEARCH
Period Obligations
08/13/1993-08/31/1995 FY94: \$150,000 TOTAL: \$200,000
Prin. Invest. NASA Tech. Officer CASE Category
D R WILSON HQ/S WANDER 49-Engr, NEC

NGT 00-050-585 University of Texas - Arlington 7811
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/31/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A K FUNG HQ/F C OWENS 45-Elec Engr

NGT 00-050-844 University of Texas - Arlington 7812
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/31/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
A K FUNG HQ/F C OWENS 45-Elec Engr

NGT 00-050-896 University of Texas - Arlington 7813
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/14/1992-01/02/1995 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
S M YANG LARC/E PRIOR 22-Computer Science

NAG 1-1121 University of Texas - Austin 7814
MODELING THE GROWTH AND INTERACTION OF FRACTURES
Period Obligations
03/26/1990-09/30/1994 FY94: \$89,348 TOTAL: \$238,314
Prin. Invest. NASA Tech. Officer CASE Category
M E MEAR LARC/J C NEWMAN JR. 46-Mech Engr
LARC/C E HARRIS

NAG 1-1204 University of Texas - Austin 7815
MODEL STUDIES OF SONIC BOOM PROPAGATION THROUGH THE
ATMOSPHERE D
Period Obligations
12/03/1990-09/30/1994 FY94: \$105,000 TOTAL: \$525,000
Prin. Invest. NASA Tech. Officer CASE Category
D T BLACKSTOCK LARC/G L MCANINCH 41-Aero Engr
A J TUCKER LARC/A W MUELLER

NAG 1-1364 University of Texas - Austin 7816
THE EFFECT OF A TYPE III AND TYPE IV SHOCK/SHOCK
INTERACTION ON HEAT TRANSFER IN THE STAGNATION REGION
Period Obligations
02/05/1992-12/31/1994 FY94: \$28,392 TOTAL: \$107,766
Prin. Invest. NASA Tech. Officer CASE Category
D E WILSON LARC/R J NOWAK 46-Mech Engr
LARC/A R WIETING

NAG 1-1459 University of Texas - Austin 7817
ADAPTIVE-GRID ALGORITHM FOR PRISMATIC ELEMENTS
Period Obligations
12/04/1992-12/31/1994 FY94: \$28,460 TOTAL: \$58,014
Prin. Invest. NASA Tech. Officer CASE Category
J KALLINDERIS LARC/R E SMITH 21-Mathematics
LARC/J J LAMBIOTTE

NAG 1-1471 University of Texas - Austin 7818
CONTROL AND REDUCTION OF UNSTEADY PRESSURE LOADS IN
SEPERATED SHOCK WAVE TURBULENT BOUNDARY LAYER INT.
Period Obligations
12/18/1992-01/01/1995 FY94: \$0 TOTAL: \$79,950
Prin. Invest. NASA Tech. Officer CASE Category
D S DOLLING LARC/W E ZORUMSKI 41-Aero Engr

NAG 1-1615 University of Texas - Austin 7819
NONLINEAR EFFECTS AT HIGH FREQUENCY IN AIRCRAFT NOISE
PROPAGATION
Period Obligations
03/25/1994-12/27/1994 FY94: \$65,000 TOTAL: \$65,000
Prin. Invest. NASA Tech. Officer CASE Category
D T BLACKSTOCK LARC/G L MCANINCH 41-Aero Engr

NAG 2-67 University of Texas - Austin 7820
STUDY OF DENSITY AND TEMPERATURE STRUCTURE OF CLOUDS
AROUND LOW LUMINOSITY YOUNG STARS
Period Obligations
09/01/1980-09/30/1994 FY94: \$61,140 TOTAL: \$3,518,561
Prin. Invest. NASA Tech. Officer CASE Category
P M HARVEY ARC/C D LANGHLIN 11-Astronomy
ARC/H A HENDRIKS

NAG 2-372 University of Texas - Austin 7821
FAR-INFRARED EMISSION LINE SPECTROSCOPY FOR THE KUIPER
AIRBORNE OBSERVATORY
Period Obligations
10/01/1987-09/30/1992 FY94: \$0 TOTAL: \$178,312
Prin. Invest. NASA Tech. Officer CASE Category
H L DINERSTEIN ARC/C D LAUGHLIN 11-Astronomy
ARC/H A HENDRIKS

NAG 2-419 University of Texas - Austin 7822
HIGH-RESOLUTION FAR-INFRARED STUDIES OF PRE-MAIN-
SEQUENCE STARS WITH MOLECULAR OUTFLOWS
Period Obligations
10/01/1987-01/31/1994 FY94: \$0 TOTAL: \$199,081
Prin. Invest. NASA Tech. Officer CASE Category
D T JAFFEE ARC/L C HAUGHNEY 11-Astronomy

NAG 2-420 University of Texas - Austin 7823
HIGH RESOLUTION FAR-INFRARED STUDIES OF PRE-MAIN-
SEQUENCE STARS WITH MOLECULAR OUTFLOWS
Period Obligations
10/01/1986-09/30/1994 FY94: \$0 TOTAL: \$187,381
Prin. Invest. NASA Tech. Officer CASE Category
N J EVANS ARC/L C HAUGHNEY 11-Astronomy

NAG 2-748 University of Texas - Austin 7824
A HIGH SPATIAL RESOLUTION STUDY OF FAR-IR CONTINUOUS
EMISSION IN GALAXIES
Period Obligations
12/18/1991-09/30/1994 FY94: \$22,131 TOTAL: \$202,069
Prin. Invest. NASA Tech. Officer CASE Category
D F LESTER ARC/C D LAUGHLIN 11-Astronomy
ARC/C M GILLESPIE JR

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 2-6002 University of Texas - Austin 7825
SCIENCE IN THE STRATOSPHERE - A CUEST TEACHER PROGRAM FOR THE KAO

Period	Obligations	TOTAL
08/22/1994-09/30/1995	FY94: \$6,000	\$6,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D F LESTER	ARC/C D LAUGHLIN	11-Astronomy
	ARC/C M GILLESPIEJR.	

NAG 3-864 University of Texas - Austin 7826
TURBULENCE MODELING FOR THE SIMULATION OF TRANSITION IN WALL SHEAR FLOWS

Period	Obligations	TOTAL
01/22/1988-02/28/1995	FY94: \$0	\$359,168
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M E CRAWFORD	LERC/F F SIMON	49-Engr, NEC

NAG 3-1023 University of Texas - Austin 7827
JOINT UNIV/NASA EXP AND COMP STUDY OF UNSTEADY SHOCK WAVE TURB BOUNDARY LAYER INTERACTION

Period	Obligations	TOTAL
03/22/1989-11/09/1993	FY94:	\$122,750
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D S DOLLING	LERC/W R HINGST	41-Aero Engr
	LERC/A R PORRO	

NAG 3-1085 University of Texas - Austin 7828
INVESTIGATION OF DIFFUSION BARRIERS IN TUNGSTEIN/NIBIUM COMPOSITES

Period	Obligations	TOTAL
10/26/1989-10/13/1992	FY94:	\$71,126
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J K TIEN	LERC/T L GROBSTEIN	47-Materials Engr
	LERC/D W PETRASEK	

NAG 3-1382 University of Texas - Austin 7829
EXPERIMENTS AND THEORY ON INSTABILITY IN SURFACE-TENSION-DRIVEN BENARD CONVECTION (MARANGONI CONVECTION)

Period	Obligations	TOTAL
12/02/1992-11/30/1994	FY94: \$100,776	\$200,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H L SWINNEY	LERC/J A SALZMAN	19-Phys Sci, NEC

NAG 3-1589 University of Texas - Austin 7830
ADVANCED STUDIES OF ELECTROMAGNETICS SCATTERING

Period	Obligations	TOTAL
04/18/1994-04/17/1995	FY94: \$100,000	\$100,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H LING	LERC/A J ZAMAN	45-Elec Engr

NAG 5-1603 University of Texas - Austin 7831
HST - GTO

Period	Obligations	TOTAL
05/20/1991-10/31/1994	FY94: \$1,599,874	\$5,426,864
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W H JEFFERYS	GSFC/S SOBIESKI	11-Astronomy

NAG 5-1616 University of Texas - Austin 7832
STELLAR SPECTROSCOPY AND THE HUBBLE SPACE TELESCOPE

Period	Obligations	TOTAL
05/24/1991-10/31/1994	FY94: \$112,100	\$375,054
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D L LAMBERT	GSFC/S SOBIESKI	11-Astronomy

NAG 5-1700 University of Texas - Austin 7833
IS THE X-RAY CONTINUUM FROM RADIO-LOUD QUASARS ORIENTATION-DEPENDENT?

Period	Obligations	TOTAL
07/15/1991-01/31/1993	FY94:	\$15,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B J WILLS	GSFC/R PETRE	11-Astronomy

NAG 5-1855 University of Texas - Austin 7834
HUBBLE SPACE TELESCOPE (HST) GUARANTEED TIME OBSERVATION

Period	Obligations	TOTAL
01/02/1992-01/14/1995	FY94: \$100,000	\$233,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
L M TRAFTON	GSFC/A SMITH	11-Astronomy

NAG 5-1929 University of Texas - Austin 7835
ESTABLISHMENT OF A FLINN SITE IN WEST TEXAS

Period	Obligations	TOTAL
03/04/1992-03/14/1995	FY94: \$30,000	\$109,998
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C R WILSON	GSFC/B G BILLS	32-Geological Sci

NAG 5-1936 University of Texas - Austin 7836
TOWARD 10 (9) GPS GEODESY: VECTOR BASELINES, EARTH ROTATION AND REFERENCE FRAMES

Period	Obligations	TOTAL
03/12/1992-03/14/1995	FY94: \$100,000	\$305,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R E SCHUTZ	GSFC/B G BILLS	32-Geological Sci

NAG 5-1939 University of Texas - Austin 7837
STUDY OF CRUSTAL DEFORMATION IN THE INDIAN-EURASIAN COLLISION ZONE

Period	Obligations	TOTAL
03/12/1992-03/14/1995	FY94: \$42,000	\$180,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B TAPLEY	GSFC/B G BILLS	32-Geological Sci

NAG 5-1970 University of Texas - Austin 7838
PRECISION ORBIT DETERMINATION AND GEOPHYSICAL PARAMETER RECOVERY USING THE TRACKING AND DATA RELAY.

Period	Obligations	TOTAL
04/15/1992-12/31/1993	FY94:	\$92,332
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B D TAPLEY	GSFC/J TELES	42-Astro Engr
	GSFC/R M BECKMAN	

NAG 5-2139 University of Texas - Austin 7839
SYNOPTIC OBSERVATIONS OF GK PERSEI

Period	Obligations	TOTAL
11/09/1992-03/31/1995	FY94: \$12,090	\$21,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J C WHEELER	GSFC/D WEST	11-Astronomy

NAG 5-2146 University of Texas - Austin 7840
LAGEOS SATELLITE LASER RANGING DATA ANALYSIS

Period	Obligations	TOTAL
12/14/1992-12/14/1994	FY94: \$113,400	\$221,400
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J EANES	GSFC/J J DEGNAN	19-Phys Sci, NEC
M M WATKINS		

NASA'S UNIVERSITY PROGRAM **TEXAS (Continued)**

NAG 5-2217			
University of Texas - Austin		7841	
MUSCULOSKELETAL MODELS AND COMPUTATIONAL ALGORITHMS FOR THE NUMERICAL SIMULATION OF HUMAN MOTION...			
<i>Period</i>	<i>Obligations</i>		
02/18/1993-11/30/1994	FY94: \$29,987	TOTAL: \$59,974	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M G PANDY	GSFC/J R FISCHER	22-Computer Science	
NAG 9-463			
University of Texas - Austin		7849	
FRACTURE CONTROL ANALYSIS OF SPACECRAFT STRUCTURES AND MECHANICAL SYSTEMS			
<i>Period</i>	<i>Obligations</i>		
09/01/1990-10/01/1993	FY94: \$0	TOTAL: \$89,973	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E BECKER	JSC/R G FORMAN	19-Phys Sci, NEC	
NAG 5-2484			
University of Texas - Austin		7842	
BORN ABUNDANCES IN A AND B TYPE STARS			
<i>Period</i>	<i>Obligations</i>		
01/29/1994-01/31/1996	FY94: \$29,051	TOTAL: \$29,051	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D L LAMBERT	GSFC/D WEST	11-Astronomy	
NAG 5-2497			
University of Texas - Austin		7843	
DENSE LINEAR ALGEBRA ALGORITHMS BASED ON PARALLEL BLAS			
<i>Period</i>	<i>Obligations</i>		
02/02/1994-02/14/1995	FY94: \$30,000	TOTAL: \$30,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R A VAN DE GEI JN	GSFC/J R FISHER	22-Computer Science	
NAG 5-2511			
University of Texas - Austin		7844	
APPLICATION OF MASSIVELY PARALLEL PROCESSING TECHNIQUES FOR LEAST SQUARES PROBLEMS IN SATELLITE . .			
<i>Period</i>	<i>Obligations</i>		
02/08/1994-02/14/1995	FY94: \$30,000	TOTAL: \$30,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B E SCHUTZ	GSFC/J R FISHER	22-Computer Science	
NAG 8-1090			
University of Texas - Austin		7845	
ATOM MEASUREMENT			
<i>Period</i>	<i>Obligations</i>		
09/07/1994-09/06/1995	FY94: \$50,000	TOTAL: \$50,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D J HEINZEN	MSFC/D A NOEVER	19-Phys Sci, NEC	
NAG 9-114			
University of Texas - Austin		7846	
HYPERVELOCITY PENETRATION STUDY COMPOSIT			
<i>Period</i>	<i>Obligations</i>		
06/01/1985-04/01/1994	FY94: \$0	TOTAL: \$238,114	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C H YEW	JSC/E L CHRISTIANSEN	47-Materials Engr	
S KYRIAKIDES			
NAG 9-397			
University of Texas - Austin		7847	
RESEARCH OF BIOSYNTHESIS OF CELLULOSE UNDER MICROGRAVITY CONDITIONS			
<i>Period</i>	<i>Obligations</i>		
09/01/1989-01/01/1994	FY94: \$0	TOTAL: \$396,250	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R M BROWN	JSC/G SPAULDING	51-Biological Sci	
	JSC/C F SAMS		
NAG 9-411			
University of Texas - Austin		7848	
ADVANCED DEVELOPMENT FOR SPACE ROBOTICS			
<i>Period</i>	<i>Obligations</i>		
02/01/1990-01/01/1995	FY94: \$0	TOTAL: \$1,110,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D TESAR	JSC/J REUTER	42-Astro Engr	
NAG 9-661			
University of Texas - Austin		7853	
DEV AND IMPLEMENTATION OF A FRAGMENTATION MODEL FOR HYPERVELOCITY			
<i>Period</i>	<i>Obligations</i>		
02/09/1993-09/30/1994	FY94: \$0	TOTAL: \$50,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C YEW	JSC/E CHRISTIANSEN	47-Materials Engr	
NAG 9-665			
University of Texas - Austin		7854	
DYNAMIC MODELING FOR FAILURE ANALYSIS			
<i>Period</i>	<i>Obligations</i>		
02/19/1993-05/01/1994	FY94: \$0	TOTAL: \$58,602	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B KUIPERS	JSC/J T MALIN	22-Computer Science	
NAG 9-666			
University of Texas - Austin		7855	
ANIMATED COMPUTER VISION TECHNOLOGY FOR A SEMI-AUTONOMOUS ROVER			
<i>Period</i>	<i>Obligations</i>		
02/22/1993-12/31/1994	FY94: \$0	TOTAL: \$64,108	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A C BOVIK	JSC/K BAKER	45-Elec Engr	
NAG 9-670			
University of Texas - Austin		7856	
MATH MODEL VERIFICATION AND UPDATING BASED ON MEASURED EXCITATIONS AND REACTIONS			
<i>Period</i>	<i>Obligations</i>		
02/25/1993-03/01/1995	FY94: \$0	TOTAL: \$53,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R R CRAIG	JSC/D A HAMILTON	41-Aero Engr	
	JSC/N E TENGLER		

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 9-671	University of Texas - Austin	7857	MUSCULOSKELETAL MODELING/OPTIMAL CNTRL OF THE HUMAN UPPER EXTREMITY
<i>Period</i>	<i>Obligations</i>		
03/05/1993-06/01/1994	FY94: \$0	TOTAL: \$64,876	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M G PANDY	JSC/G K KLUTE	49-Engr, NEC	
R E BARR			
NAG 9-675	University of Texas - Austin	7858	SMOOTH PARTICLE HYDRODYNAMICS MODELING FOR ORBITAL SHIELD DESIGN
<i>Period</i>	<i>Obligations</i>		
04/01/1993-12/01/1994	FY94: \$0	TOTAL: \$59,966	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E P FAHRENTHOLD	JSC/E L CHRISTIANSEN	41-Aero Engr	
C H YEW			
NAG 9-679	University of Texas - Austin	7859	COOLING OF AIRLOCKS AND HYPERBARIC TREATMENT FACILITIES DURING RAPID PRESSURIZATION
<i>Period</i>	<i>Obligations</i>		
03/24/1993-01/01/1995	FY94: \$0	TOTAL: \$60,738	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
K BALL	JSC/J MARMOLEJO	46-Mech Engr	
T BERGMAN			
NAG 9-744	University of Texas - Austin	7860	OBLIQUE HYPERVELOCITY IMPACT SIMULATION FOR MULTI-LAYER ORBITAL DEBRIS SHIELDING
<i>Period</i>	<i>Obligations</i>		
06/22/1994-06/01/1995	FY94: \$59,740	TOTAL: \$59,740	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E P FAHRENTHOLD	JSC/E CHRISTIANSEN	46-Mech Engr	
NAG 9-745	University of Texas - Austin	7861	WIDE AREA NETWORK INSTANTIATION DEPLOYMENT AND MANAGEMENT OF AUTONOMOUS KNOWLEDGE ROBOTS
<i>Period</i>	<i>Obligations</i>		
06/10/1994-10/01/1994	FY94: \$50,000	TOTAL: \$50,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C H WARLICK	JSC/M E RORVIG	22-Computer Science	
C D STOUT			
NAG 9-750	University of Texas - Austin	7862	DEMO OF SKY GPS RECEIVER ON WAKE SHIELD FACILITY
<i>Period</i>	<i>Obligations</i>		
08/04/1994-07/01/1995	FY94: \$46,565	TOTAL: \$46,565	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B E SCHUTZ	JSC/R CARPENTER	41-Aero Engr	
P A ABUSALI			
NAGW 1477	University of Texas - Austin	7863	A CONTINUED PROGRAM OF PLANETARY STUDY AT THE UNIV
<i>Period</i>	<i>Obligations</i>		
12/12/1988-12/31/1994	FY94: \$207,150	TOTAL: \$2,017,997	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H J SMITH	HQ/J H RAHE	11-Astronomy	
NAGW 1519	University of Texas - Austin	7864	CELLULAR BASIS OF GRAVITY AND LIGHT-INDUCED GEOTROPISM
<i>Period</i>	<i>Obligations</i>		
11/21/1988-10/31/1994	FY94: \$60,000	TOTAL: \$372,673	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S J ROUX	HQ/T W HALSTEAD	51-Biological Sci	
NAGW 1807	University of Texas - Austin	7865	ASTROPHYSICS OF QUASARS
<i>Period</i>	<i>Obligations</i>		
06/28/1989-06/30/1993	FY94: \$0	TOTAL: \$90,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G A SHIELDS	HQ/G C CLAYTON	11-Astronomy	
NAGW 1834	University of Texas - Austin	7866	THE MONITORING OF CHANGES IN GLOBAL MEAN SEA LEVEL
<i>Period</i>	<i>Obligations</i>		
11/29/1989-12/31/1993	FY94: \$0	TOTAL: \$315,100	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B D TAPLEY	HQ/N B DOUGLAS	99-Multi-Discip	
R E SCHUTZ	HQ/M BALTUCK		
C K SHUM			
NAGW 1959	University of Texas - Austin	7867	THE DETERMINATION OF CRUSTAL MOTIONS USING SATELLITE LASER RANGING TO LAGEOS-II AND LAGEOS-I
<i>Period</i>	<i>Obligations</i>		
05/29/1990-03/31/1994	FY94: \$245,000	TOTAL: \$827,100	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B D TAPLEY	HQ/M BALTUCK	31-Atmos Sci	
NAGW 2132	University of Texas - Austin	7868	PRECISION ORBIT DETERMINATION AND CALIBRATION SUPPORT FOR U.S. WORLD OCEAN CIRCULATION EXPERIMENT
<i>Period</i>	<i>Obligations</i>		
09/07/1990-03/31/1995	FY94: \$100,000	TOTAL: \$890,750	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B TAPLEY	HQ/G S LAGERLOEF	33-Oceanography	
	HQ/W S WILSON		
NAGW 2288	University of Texas - Austin	7869	PHYSICAL OBSERVATIONS OF COMETS THEIR COMPOSITION ORIGIN AND EVOLUTION
<i>Period</i>	<i>Obligations</i>		
06/13/1991-06/30/1994	FY94: \$0	TOTAL: \$223,315	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A L COCHRAN	HQ/J RAHE	11-Astronomy	
NAGW 2302	University of Texas - Austin	7870	A SEARCH FOR OTHER SOLAR SYSTEMS
<i>Period</i>	<i>Obligations</i>		
07/09/1991-07/31/1994	FY94: \$0	TOTAL: \$135,086	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W D COCHRAN	HQ/J A NUTH	19-Phys Sci, NEC	
NAGW 2314	University of Texas - Austin	7871	NAGW-2314/UNIV TEXAS & AUSTIN/GROUND BASED STUDIES OF THE OUTER PLANETS
<i>Period</i>	<i>Obligations</i>		
06/13/1991-07/31/1997	FY94: \$86,400	TOTAL: \$278,400	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L M TRAFTON	HQ/J H RAHE	11-Astronomy	
NAGW 2323	University of Texas - Austin	7872	A MULTI-WAVELENGTH STUDY OF PROTOSTARS AND DISKS
<i>Period</i>	<i>Obligations</i>		
07/09/1991-10/31/1994	FY94: \$0	TOTAL: \$180,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P M HARVEY	HQ/J A NUTH	19-Phys Sci, NEC	
N J EVANS			

NASA'S UNIVERSITY PROGRAM **TEXAS (Continued)**

NAGW 2399 University of Texas - Austin 7873
THE EVOLUTION OF THE INTERGALACTIC MEDIUM AND THE FORMATION OF GALAXIES AND LARGE-SCALE STRUCTURE

Period	Obligations	
05/09/1991-12/31/1994	FY94: \$43,500	TOTAL: \$300,912
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P R SHAPIRO	HQ/G S KUTTER	11-Astronomy
	HQ/G R RIEGLER	

NAGW 2970 University of Texas - Austin 7881
INVESTIGATING RELATIVITY PARAMETERS WITH LUNAR LASER RANGING DATA

Period	Obligations	
03/12/1992-12/31/1994	FY94: \$99,790	TOTAL: \$298,770
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P J SHELUS	HQ/R STACHNIK	41-Aero Engr

NAGW 2418 University of Texas - Austin 7874
SELECTED DYNAMO PROBLEMS IN ASTROPHYSICS

Period	Obligations	
08/02/1991-12/31/1995	FY94: \$60,000	TOTAL: \$420,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E T VISHNIAC	HQ/G S KUTTER	11-Astronomy
	HQ/G R RIEGLER	

NAGW 2975 University of Texas - Austin 7882
BLACK HOLES IN BINARY STELLAR SYSTEMS

Period	Obligations	
03/06/1992-01/31/1994	FY94: \$0	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J WHEELER	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

NAGW 2465 University of Texas - Austin 7875
RADIAL VELOCITY DETECTION OF EXTRA-SOLAR PLANETARY SYSTEMS

Period	Obligations	
06/03/1991-12/31/1993	FY94: \$0	TOTAL: \$282,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W D COCHRAN	HQ/J RAHE	11-Astronomy

NAGW 3111 University of Texas - Austin 7883
ASTROMETRIC SUPPORT FOR THE REDUCTION OF HIPPARCOS COORDINATE SYSTEM DATE

Period	Obligations	
06/23/1992-06/30/1994	FY94: \$69,691	TOTAL: \$139,381
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P D HEMENWAY	HQ/R V STACHNIK	11-Astronomy
	HQ	

NAGW 2590 University of Texas - Austin 7876
NAGW-2590/UNIV TEXAS "AUSTIN/COLLISIONLESS DYNAMICS OF MAGNETOSPHERIC SUBSTORM PHENOMENA

Period	Obligations	
07/16/1991-05/31/1995	FY94: \$25,000	TOTAL: \$223,776
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W HORTON	HQ/M M MELLOTT	13-Physics
	HQ/J D BOHLIN	

NAGW 3119 University of Texas - Austin 7884
NAGW-3119/UNIV TEXAS/DETERMINATION OF THE EARTH'S GRAVITATIONAL POTENTIAL MODEL

Period	Obligations	
06/26/1992-06/30/1994	FY94: \$0	TOTAL: \$100,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B D TAPLEY	HQ/R E MURPHY	32-Geological Sci
	HQ/D M BUTLER	

NAGW 2615 University of Texas - Austin 7877
EARTH SYSTEM DYNAMICS: THE DETERMINATION AND INTERPRETATION OF THE GLOBAL ANGULAR MOMENTUM BUDGET

Period	Obligations	
07/24/1991-12/31/1994	FY94: \$1,087,000	TOTAL: \$3,219,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B TAPLEY	HQ/A J ANDERSON	39-Env Sci, NEC
	HQ/W S WILSON	

NAGW 3131 University of Texas - Austin 7885
NAGW-3131/UNIV TEXAS/INVESTIGATION OF HIGH FREQUENCY VARIATIONS IN EARTH ORIENTATION AND ROTATION

Period	Obligations	
07/02/1992-12/31/1994	FY94: \$62,000	TOTAL: \$184,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C R WILSON	HQ/R E MURPHY	39-Env Sci, NEC
	HQ/D M BUTLER	

NAGW 2815 University of Texas - Austin 7878
DISTURBANCE, SPATIAL HETEROGENEITY, AND BIOTIC DIVERSITY IN ARID AUSTRALIA

Period	Obligations	
01/17/1992-11/30/1993	FY94: \$0	TOTAL: \$200,558
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E R PIANKA	HQ/J D RUMMEL	54-Env Biology

NAGW 3246 University of Texas - Austin 7886
NAGW-3246/UNIV TEXAS AUSTIN/SCIENCE IN THE STRASTOSPHERE: A GREAT TEACHER PLAN FOR THE KAO

Period	Obligations	
11/09/1992-07/31/1993	FY94: \$0	TOTAL: \$2,704
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D F LESTER	HQ/L S LAPIANA	11-Astronomy
	HQ/G P NEWTON	

NAGW 2905 University of Texas - Austin 7879
THEORETICAL INFRARED SPECTRA OF SUPERNOVAE

Period	Obligations	
02/20/1992-11/30/1994	FY94: \$65,000	TOTAL: \$183,560
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J C WHEELER	HQ/L J CAROFF	11-Astronomy

NAGW 3306 University of Texas - Austin 7887
NAGW-3306/UNIV TEXAS "AUSTIN/MONITORING OF THE MARTIAN H2O ABUNDANCE IN 1992-93

Period	Obligations	
12/31/1992-12/31/1994	FY94: \$0	TOTAL: \$29,211
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E S BARKER	HQ/H C BRINTON	11-Astronomy

NAGW 2941 University of Texas - Austin 7880
THE STUDY OF EFFECTS OF THE VARIATIONS IN THE EARTH'S GRAVITY FIELD ON GEODETIC SATELLITES

Period	Obligations	
02/28/1992-12/31/1994	FY94: \$68,100	TOTAL: \$195,775
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C K SHUM	HQ/R E MURPHY	13-Physics
	HQ/D M BUTLER	

NAGW 3505 University of Texas - Austin 7888
NAGW-2505/UNIV TEXAS AUSTIN/VENUSIAN GRAVITATIONAL FIELD AND TOPOGRAPH USING PIONEER VENUS ORBITER

Period	Obligations	
04/16/1993-03/31/1995	FY94: \$24,500	TOTAL: \$59,500
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C K SHUM	HQ/J T BERGSTRALH	32-Geological Sci

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAGW 3743	University of Texas - Austin	7889	NAG10-143	University of Texas - Austin	7897
NASA SAR AUSTRALIAN OVERFLIGHT PROJECT			MICROBIAL CELLULOSE ASSEMBLY IN MICROGRAVITY		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
09/17/1993-06/30/1994	FY94: \$0	TOTAL: \$27,267	08/15/1994-08/14/1995	FY94: \$99,835	TOTAL: \$99,835
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M M CRAWFORD	HQ/D E WICKLAND	39-Env Sci, NEC	R M BROWN JR.	KSC/W M KNOTT	51-Biological Sci
B TAPLEY	HQ/A C JANETOS				
NAGW 3781	University of Texas - Austin	7890	NAS 3-26403	University of Texas - Austin	7898
CREW SELECTION AND TRAINING CROSS-CULTURAL DIFFERENCES AS DETERMINANTS OF TEAM BEHAVIOR			LAND-MOBILE-SATELLITE MEASUREMENTS IN CENTRAL MARY LAND AND ALASKA USING ACTS: PASSIVE ANTENNA TRACKING		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
09/29/1993-02/28/1995	FY94: \$20,000	TOTAL: \$20,000	04/15/1993-01/15/1995	FY94: \$0	TOTAL: \$83,874
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R L HELMREICH	HQ/J H STOKLOSA	59-Life Sci, NEC	W J VOGEL	LERC/R J GUNDERMAN	99-Multi-Discip
NAGW 3971	University of Texas - Austin	7891	NAS 5-30942	University of Texas - Austin	7899
PHYSICAL OBSERVATIONS OF COMETRAY COMAE			MANAGEMENT AND OPERATION OF THE MCDONALD LASER RANGING STATION		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
05/14/1994-03/31/1995	FY94: \$62,402	TOTAL: \$62,402	03/01/1991-02/28/1995	FY94: \$485,182	TOTAL: \$1,940,182
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A COCHRAN	HQ/J H RAHE	11-Astronomy	P J SHELUS	GSFC/J F MCGARRY	32-Geological Sci
NAGW 3990	University of Texas - Austin	7892	NAS 5-33021	University of Texas - Austin	7900
RADIAL VELOCITY DETECTION OF EXTRA SOLAR PLANETARY SYSTEMS			EOS INTERDISCIPLINARY STUDY FOR THE GEODYNAMICS LASER		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
05/13/1994-02/28/1995	FY94: \$139,200	TOTAL: \$139,200	12/12/1989-12/31/1994	FY94: \$345,000	TOTAL: \$650,200
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W COCHRAN	HQ/J H RAHE	11-Astronomy	B SCHUTZ	GSFC/G SOFFE	39-Env Sci, NEC
NAGW 4012	University of Texas - Austin	7893	NCC 2-286	University of Texas - Austin	7901
CCD ASTROMETRY OF FAINT SOLAR SYSTEM OBJECTS			CREW SELECTION, TRAINING, AND PERFORMANCE		
<i>Period</i>	<i>Obligations</i>		<i>Period</i>	<i>Obligations</i>	
05/23/1994-02/28/1995	FY94: \$23,998	TOTAL: \$23,998	11/01/1987-12/31/1994	FY94: \$150,000	TOTAL: \$2,100,726
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A WHIPPLE	HQ/J H RAHE	11-Astronomy	R L HELMREICH	ARC/B G KANKI	62-Social Aspects
NAGW 4027	University of Texas - Austin	7894		ARC/T R CHIDESTER	
DIFFRACTION GRATING FOR COMPACT IR SPECTROMETERS IN SPACE			NCC 2-760	University of Texas - Austin	7902
<i>Period</i>	<i>Obligations</i>		SELF-CALIBRATING MODELS FOR DYNAMIC MONITORING AND DIAGNOSIS		
05/24/1994-04/30/1995	FY94: \$66,899	TOTAL: \$66,899	<i>Period</i>	<i>Obligations</i>	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	05/20/1992-10/31/1994	FY94: \$190,679	TOTAL: \$530,680
D JAFFE	HQ/L J CAROFF	11-Astronomy	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
NAGW 4076	University of Texas - Austin	7895	B J KUIPERS	ARC/P E FRIEDLAND	22-Computer Science
CONTEMPORARY PROBLEMS IN GLOBAL GEODYNAMICS				ARC/D E THOMPSON	
<i>Period</i>	<i>Obligations</i>		NCC 2-787	University of Texas - Austin	7903
07/12/1994-05/31/1995	FY94: \$39,983	TOTAL: \$39,983	DEVELOPMENT AND IMPLEMENTATION OF NASA TECHNOLOGY COMMERCIALIZATION FIELD CENTERS (NTCC)		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Period</i>	<i>Obligations</i>	
B TAPLEY	HQ/M BALTUCK	32-Geological Sci	04/21/1993-10/31/1994	FY94: \$989,500	TOTAL: \$1,389,500
NAGW 4087	University of Texas - Austin	7896	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
REMOTE SENSING SOIL MOISTURE USING FOUR DIMENSIONAL DATA ASSIMILATION			G KOZMETSKY	ARC/G S LEE	99-Multi-Discip
<i>Period</i>	<i>Obligations</i>			ARC/V L PETERSON	
07/26/1994-06/30/1997	FY94: \$53,853	TOTAL: \$53,853	NCC 3-273	University of Texas - Austin	7904
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	ADVANCED STUDIES OF ELECTROMAGNETIC SCATTERING		
J S FAMIGLIETTI	HQ/M Y WEI	39-Env Sci, NEC	<i>Period</i>	<i>Obligations</i>	
	HQ/J S THEON		06/23/1992-04/15/1994	FY94: \$0	TOTAL: \$60,000
			<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
			H LING	LERC/A J ZAMAN	45-Elec Engr

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NCC 9-22 University of Texas - Austin 7905
DEVELOPEMENT IMPLEMENTATION OF A NASA BASED TECH
COMMERCIALIZATION
Period Obligations
02/04/1993-11/30/1994 FY94: \$785,000 TOTAL: \$1,185,000
Prin. Invest. NASA Tech. Officer CASE Category
G KOZMETSKY JSC/W J HUFFSTETLER 99-Multi-Discip

NCC 9-35 University of Texas - Austin 7906
WAKESHIELD WSF-02 GPS EXPERIMENT
Period Obligations
09/12/1994-09/01/1995 FY94: \$14,720 TOTAL: \$14,720
Prin. Invest. NASA Tech. Officer CASE Category
B E SCHULTZ JSC/J LEDIT 41-Aero Engr
P ABUSALI

NGT 00-030-001 University of Texas - Austin 7907
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
10/03/1990-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
V NUTH HQ/G ASRAR 39-Env Sci, NEC

NGT 00-030-129 University of Texas - Austin 7908
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
11/09/1992-08/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
A SLUYTER HQ/G ASRAR 39-Env Sci, NEC
HQ/G M BUTLER

NGT 00-030-158 University of Texas - Austin 7909
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
11/09/1992-08/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
C PARMESEAN HQ/G ASRAR 39-Env Sci, NEC
HQ/D E WICKLAND

NGT 00-030-194 University of Texas - Austin 7910
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
08/26/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
K W BUTZER HQ/G ASRAR 31-Atmos Sci
HQ/D M BUTLER

NGT 00-040-003 University of Texas - Austin 7911
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
10/10/1989-02/28/1995 FY94: \$451,610 TOTAL: \$2,296,580
Prin. Invest. NASA Tech. Officer CASE Category
B D TAPLEY HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-050-422 University of Texas - Austin 7912
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/10/1989-05/31/1993 FY94: TOTAL: \$60,701
Prin. Invest. NASA Tech. Officer CASE Category
B E SCHUTZ HQ/F C OWENS 22-Computer Science

NGT 00-050-573 University of Texas - Austin 7913
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/13/1990-08/31/1993 FY94: TOTAL: \$60,312
Prin. Invest. NASA Tech. Officer CASE Category
W T FOWLER HQ/F C OWENS 41-Aero Engr

NGT 00-050-594 University of Texas - Austin 7914
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/05/1990-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R F SIMMONS HQ/F C OWENS 22-Computer Science

NGT 00-050-620 University of Texas - Austin 7915
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/26/1990-08/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J C WHEELER HQ/F C OWENS 11-Astronomy

NGT 00-050-659 University of Texas - Austin 7916
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/13/1990-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
G A SHIELDS HQ/F C OWENS 11-Astronomy

NGT 00-050-732 University of Texas - Austin 7917
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/19/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
R MOONEY HQ/F C OWENS 22-Computer Science

NGT 00-050-760 University of Texas - Austin 7918
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
12/19/1991-01/31/1993 FY94: \$0 TOTAL: \$32,000
Prin. Invest. NASA Tech. Officer CASE Category
B D TAPIEY GSFC/G SOFFEN 42-Astro Engr

NGT 00-050-849 University of Texas - Austin 7919
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
09/04/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
P R SHAPIRO HQ/F C OWENS 11-Astronomy

NGT 00-050-853 University of Texas - Austin 7920
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/12/1991-08/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
J C WHEELER HQ/F C OWENS 13-Physics

NGT 00-050-869 University of Texas - Austin 7921
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/07/1992-06/30/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
T KODADEK HQ/J K ALEXANDER 12-Chemistry

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NGT 00-050-998	University of Texas - Austin	7922	
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/28/1992-08/31/1995	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D T JAFFE	HQ/J K ALEXANDER	11-Astronomy	
NGT 00-051-025	University of Texas - Austin	7923	
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/14/1992-08/31/1996	FY94: \$22,000	TOTAL: \$43,710	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M G PANDY	ARC/M MOORE	46-Mech Engr	
NGT 00-051-065	University of Texas - Austin	7924	
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
06/02/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S ROUX	HQ/R WHITE	55-Agriculture Sci	
NGT 00-051-138	University of Texas - Austin	7925	
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/29/1993-08/31/1995	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C SEDAN	HQ/D HOLLAND	11-Astronomy	
NGT 00-051-151	University of Texas - Austin	7926	
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/03/1994-08/31/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H L SWINNEY	HQ/B CARPENTER	13-Physics	
NGT 00-051-332	University of Texas - Austin	7927	
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/27/1994-08/31/1997	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R MOONEY	HQ/D HOLLAND	22-Computer Science	
NGT 00-051-365	University of Texas - Austin	7928	
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/16/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B G SANDERS	HQ/G LESANE	51-Biological Sci	
NGT 00-070-032	University of Texas - Austin	7929	
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
10/05/1987-05/31/1993	FY94: \$0	TOTAL: \$98,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P VARGHESE	HQ/F C OWENS	41-Aero Engr	
NGT 00-070-111	University of Texas - Austin	7930	
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
01/17/1989-01/15/1995	FY94: \$0	TOTAL: \$102,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G F CAREY	HQ/R J HAYDUK	49-Engr, NEC	
NGT 00-070-222	University of Texas - Austin	7931	
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
12/01/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D TESAR	HQ/F C OWENS	46-Mech Engr	
NGT 00-070-252	University of Texas - Austin	7932	
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
06/25/1992-06/30/1995	FY94: \$22,000	TOTAL: \$64,200	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R E BARR	JSC/S GOLDSTEIN	46-Mech Engr	
NGT 00-070-262	University of Texas - Austin	7933	
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/18/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B D TAPLEY	JPL/H ASHKENAS	41-Aero Engr	
NGT 00-070-270	University of Texas - Austin	7934	
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/09/1992-06/30/1993	FY94: \$0	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D S DOLLING	LARC/E J PRIOR	41-Aero Engr	
NGT 00-070-338	University of Texas - Austin	7935	
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
06/29/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J CABBELL	HQ/D K RUSSELL	45-Elec Engr	
NGT 00-090-097	University of Texas - Austin	7936	
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)			
<i>Period</i>	<i>Obligations</i>		
09/24/1992-08/14/1994	FY94: \$0	TOTAL: \$18,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E ARMENDARIZ	HQ/D K RUSSELL	99-Multi-Discip	
NGT 00-090-216	University of Texas - Austin	7937	
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/23/1993-08/14/1994	FY94: \$0	TOTAL: \$12,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S KONRADI	HQ/D K RUSSELL	99-Multi-Discip	
NAG 5-305	University of Texas - Dallas	7938	
RETORDING POTENTIAL ANALYZER RESEARCH			
<i>Period</i>	<i>Obligations</i>		
04/01/1983-12/31/1992	FY94:	TOTAL: \$1,389,564	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W HANSON	GSFC/G D BULLOCK GSFC/R A HOFFMAN	19-Phys Sci, NEC	

**NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)**

NAG 5-306 University of Texas - Dallas 7939			
ION DRIFT METER RESEARCH			
<i>Period</i>	<i>Obligations</i>		
04/01/1983-12/31/1992	FY94:	TOTAL: \$1,634,579	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R A HEELIS	GSFC/G D BULLOCK	19-Phys Sci, NEC	
	GSFC/R A HOFFMAN		
NAG 5-1641 University of Texas - Dallas 7940			
SATELLITE DATA ARCHIVING			
<i>Period</i>	<i>Obligations</i>		
06/24/1991-08/14/1994	FY94: \$0	TOTAL: \$203,930	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W B HANSON	GSFC/T L AGGSON	19-Phys Sci, NEC	
	GSFC/R A HOFFMAN		
NAGW 1665 University of Texas - Dallas 7941			
INTERDISCIPLINARY STUDY OF PLANETARY ATMOSPHERES			
<i>Period</i>	<i>Obligations</i>		
02/10/1989-10/31/1994	FY94: \$77,114	TOTAL: \$434,211	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
F S JOHNSON	HQ/J T BERGSTRALH	31-Atmos Sci	
NAGW 2432 University of Texas - Dallas 7942			
INFLUENCE OF IONOSPHERE/ENOSPHERE COUPLING ON THE DIFFERENTIAL ESCAPE OF DEUTERIUM AND HYDROGEN			
<i>Period</i>	<i>Obligations</i>		
04/11/1991-04/30/1994	FY94: \$0	TOTAL: \$135,477	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R R HODGES	HQ/M M MELLOTT	13-Physics	
	HQ/J D BOHLIN		
NAGW 2490 University of Texas - Dallas 7943			
INTERACTIONS OF GAS PHASE VOLATILES WITH THE LUNAR REGOLITH			
<i>Period</i>	<i>Obligations</i>		
06/07/1991-05/31/1994	FY94: \$50,000	TOTAL: \$150,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R R HODGES	HQ/J T BERGSTRALH	11-Astronomy	
NAGW 2534 University of Texas - Dallas 7944			
NAGW-2534/UNIV TEXAS "A" DALLAS/A SATELLITE ANEMOMETER			
<i>Period</i>	<i>Obligations</i>		
06/03/1991-04/30/1995	FY94: \$0	TOTAL: \$191,050	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R R HODGES	HQ/W L QUAIDO	19-Phys Sci, NEC	
	HQ/J D BOHLIN		
NAGW 2535 University of Texas - Dallas 7945			
NAGW-2535/UNIV TEXAS "A" DALLAS/MARS '94 CO-INVESTIGATOR PROGRAM: STUDY OF THE DYNAMICS OF THE MARTIAN ATMOSPHERE			
<i>Period</i>	<i>Obligations</i>		
06/03/1991-04/30/1995	FY94: \$56,000	TOTAL: \$205,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R R HODGES	HQ/W L QUAIDO	19-Phys Sci, NEC	
NAGW 3444 University of Texas - Dallas 7946			
STUDY OF THE PIONEER VENUS SOUNDER PROBE NEUTRAL MASS			
<i>Period</i>	<i>Obligations</i>		
03/15/1993-03/14/1996	FY94: \$21,600	TOTAL: \$51,526	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R R HODGES	HQ/J T BERGSTRALH	31-Atmos Sci	
NAGW 3466 University of Texas - Dallas 7947			
STUDY OF POLAR IONOSPHERIC FLOWS DURING TIMES OF TOTAL SOLAR MINIMUM			
<i>Period</i>	<i>Obligations</i>		
04/09/1993-02/28/1995	FY94: \$58,549	TOTAL: \$110,164	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M R HAIRSTON	HQ/M M MELLOTT	13-Physics	
	HQ/G L WITHBROE		
NAGW 4002 University of Texas - Dallas 7948			
INVESTIGATIONS OF THE ROLE OF GRAVITY WAVES IN THE GENERATION OF EQUATORIAL BUBBLES			
<i>Period</i>	<i>Obligations</i>		
05/14/1994-04/30/1996	FY94: \$58,000	TOTAL: \$58,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W B HANSON	HQ/M M MELLOTT	13-Physics	
NAS 5-32571 University of Texas - Dallas 7949			
IONOSPHERIC DYNAMICS INSTRUMENT (IDI) INVESTIGATION			
<i>Period</i>	<i>Obligations</i>		
09/29/1993-09/30/1994	FY94: \$300,000	TOTAL: \$300,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R HEILIS	GSFC/J MCGUIRE	31-Atmos Sci	
NAS 8-33827 University of Texas - Dallas 7950			
RESEARCH STUDY MEASUREMENT OF VISIBLE AND UV EMISSIONS FROM ENERGETIC NEUTRAL ATOM PRECIPITATION			
<i>Period</i>	<i>Obligations</i>		
08/12/1980-06/30/1994	FY94: \$0	TOTAL: \$550,727	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B A TINSLEY	MSFC/J E JOHNSON	31-Atmos Sci	
D P ROHRBAUGH	MSFC/R ISE		
NAS 8-39692 University of Texas - Dallas 7951			
MINIATURE MAGNETIC MASS ANALYZER			
<i>Period</i>	<i>Obligations</i>		
11/10/1992-11/09/1995	FY94: \$0	TOTAL: \$75,044	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J H HOFFMAN	MSFC/C J POLLOCK	39-Env Sci, NEC	
	MSFC/T E MOORE		
NAS 9-18736 University of Texas - Dallas 7952			
SPACE LIFE SCIENCE			
<i>Period</i>	<i>Obligations</i>		
07/06/1992-11/30/1993	FY94: \$16,666	TOTAL: \$285,923	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J BUCKEY	JSC/K NEWKIRK	59-Life Sci, NEC	
NCC 2-8002 University of Texas - Dallas 7953			
AN AGREEMENT IMPLEMENTING THE INTERGOVERNMENTAL PERSONNEL ACT OF 1970			
<i>Period</i>	<i>Obligations</i>		
04/20/1994-08/31/1994	FY94: \$3,000	TOTAL: \$3,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L R HUNT	ARC/G MEYER	41-Aero Engr	
NAG 2-670 University of Texas - El Paso 7954			
INTERDISCIPLINARY INVESTIGATIONS IN SUPPORT OF PROJECT DI-MOD			
<i>Period</i>	<i>Obligations</i>		
08/24/1990-08/31/1994	FY94: \$20,000	TOTAL: \$196,721	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S A STARKS	ARC/D L PETERSON	54-Env Biology	
C A HOWARD			
L F MAYBERRY			

NASA'S UNIVERSITY PROGRAM
TEXAS (Continued)

NAG 3-1380 **University of Texas - El Paso** **7955**
IMAGE COMPRESSION BASED ON INCOMPLETE AND OVERCOMPLETE SUBBAND DECOMPOSITIONS
Period *Obligations*
11/10/1992-01/03/1995 FY94: \$74,753 TOTAL: \$149,499
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S D CABRERA LERC/D R GLOVER 29-Math/Computer, NEC

NAG 8-1021 **University of Texas - El Paso** **7956**
GROWTH CONDITIONS FOR SURFACE OXIDES ON ALUMINUM ALLOYS
Period *Obligations*
02/08/1994-02/07/1995 FY94: \$66,481 TOTAL: \$66,481
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P W WANG MSFC/M R CARRUTH JR. 19-Phys Sci, NEC
W P RUSSELL MSFC/B H NERREN
J C MCCLURE

NAG 8-1056 **University of Texas - El Paso** **7957**
A STUDY OF THE GAS PURITY SENSITIVITY OF VARIABLE POLARITY PLASMA ARC WELDED ALUMINUM LITHIUM ALLOYS
Period *Obligations*
05/03/1994-05/02/1995 FY94: \$46,049 TOTAL: \$46,049
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C MCCLURE MSFC/A C NUNES 47-Materials Engr
MSFC/C RUSSELL

NAG 9-479 **University of Texas - El Paso** **7958**
MULTIPLE SENSOR INTEGRATION FOR STATE AND TREND MONITORS
Period *Obligations*
10/01/1990-09/01/1994 FY94: \$0 TOTAL: \$63,773
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S A STARKS JSC/D LAWLER 22-Computer Science
JSC/K E HENDERSON

NAG 9-461 **University of Texas - El Paso** **7959**
CHARACTERIZATION OF MATERIALS INTERACTION AND DEGRADATION IN SPACE
Period *Obligations*
09/01/1990-01/01/1995 FY94: \$55,100 TOTAL: \$169,352
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L E MURR JSC/S L KOONTZ 47-Materials Engr
JSC/K E HENDERSON

NAG 9-482 **University of Texas - El Paso** **7960**
UNCERTAINTY REASONING IN EXPERT SYSTEMS
Period *Obligations*
09/01/1990-04/01/1993 FY94 TOTAL: \$60,857
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V KREINOVICH JSC/R N LEA 22-Computer Science
JSC/K E HENDERSON

NAG 9-483 **University of Texas - El Paso** **7961**
RELIABILITY OF DAMAGED SPACE STRUCTURES FOR VIBRATION MEASUREMENTS
Period *Obligations*
10/01/1990-10/01/1995 FY94: \$125,075 TOTAL: \$238,575
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C M FERREGUT JSC/R A ROCHA 46-Mech Engr
R O OSEQUEDA JSC/K E HENDERSON

NAG 9-755 **University of Texas - El Paso** **7962**
NASA PHYSICS CENTER
Period *Obligations*
07/27/1994-09/01/1997 FY94: \$84,821 TOTAL: \$84,821
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A LOPEZ JSC/A POTTER 13-Physics

NAG 9-756 **University of Texas - El Paso** **7963**
AUTOMATED SYSTEM TREND MONITORING BASED UPON TIME SERIES ANALYSIS
Period *Obligations*
09/08/1994-08/31/1995 FY94: \$61,613 TOTAL: \$61,613
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S A SPARKS JSC/G L PACK 42-Astro Engr

NAG 9-757 **University of Texas - El Paso** **7964**
INTELLIGENT CONTROL/WHICH ALGORITHM TO CHOOSE
Period *Obligations*
09/01/1994-08/31/1995 FY94: \$64,902 TOTAL: \$64,902
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V KREINEVICH JSC/J CARVAJAL 42-Astro Engr

NAS 8-39602 **University of Texas - El Paso** **7965**
ASYMMETRIC GAS FLOW AND UNDERCUTTING DURING VARIABLE POLARITY PLASMA ARC WELDING
Period *Obligations*
09/10/1992-09/09/1994 FY94: \$0 TOTAL: \$72,839
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C MCCLURE MSFC/A C NUNES 47-Materials Engr
MSFC/C K RUSSELL

NGT 00-070-215 **University of Texas - El Paso** **7966**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
06/07/1991-06/30/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C MCCLURE HQ/F C OWENS 46-Mech Engr

NGT 00-070-245 **University of Texas - El Paso** **7967**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
07/24/1991-10/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J MCCLURE HQ/F C OWENS 47-Materials Engr
R ARROWOOD

NGT 00-070-246 **University of Texas - El Paso** **7968**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
08/30/1991-09/25/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C MCCLURE HQ/F C OWENS 47-Materials Engr

NGT 00-070-297 **University of Texas - El Paso** **7969**
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
Period *Obligations*
08/04/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C MCCLURE MSFC/F SIX 47-Materials Engr

NASA'S UNIVERSITY PROGRAM **TEXAS (Continued)**

NGT 00-070-343 University of Texas - El Paso 7970
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
07/06/1993-06/30/1995 FY94: \$22,000 TOTAL: \$43,400
Prin. Invest. NASA Tech. Officer CASE Category
L E MURR HQ/D K RUSSELL 47-Materials Engr

NGT 00-070-350 University of Texas - El Paso 7971
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
08/04/1993-07/31/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
K MARSAGLIA HQ/D K RUSSELL 32-Geological Sci

NGT 00-070-354 University of Texas - El Paso 7972
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
09/02/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
C FERREGUT HQ/D K RUSSELL 46-Mech Engr

NGT 00-090-044 University of Texas - El Paso 7973
MINORITY UNDER GRADUATE RESEARCHERS PROGRAM
Period Obligations
08/22/1991-08/31/1995 FY94: \$62,033 TOTAL: \$129,137
Prin. Invest. NASA Tech. Officer CASE Category
A LOPEZ HQ/B WHITE 99-Multi-Discip

NGT 00-090-125 University of Texas - El Paso 7974
GRADUATE STUDENT RESEARCHERS PROGRAM/UMF
Period Obligations
11/27/1992-08/14/1995 FY94: \$22,281 TOTAL: \$34,281
Prin. Invest. NASA Tech. Officer CASE Category
A LOPEZ HQ/D K RUSSELL 99-Multi-Discip

NAG 5-2210 University of Texas at Brownsville 7975
EXPLOITING STRUCTURE: INTRODUCTION AND MOTIVATION
Period Obligations
02/18/1993-08/31/1995 FY94: \$47,581 TOTAL: \$104,091
Prin. Invest. NASA Tech. Officer CASE Category
Z L XU GSFC/G E MOSIER 41-Aero Engr

NAG 2-819 University of Texas at San Antonio 7976
MONOCLONAL ANTIBODIES DIRECTED AGAINST SURFACE MOLECULES OF MULTICELL SPHEROIDS
Period Obligations
12/15/1992-12/31/1994 FY94: \$72,903 TOTAL: \$143,591
Prin. Invest. NASA Tech. Officer CASE Category
A O MARTINEZ ARC/R A GRIMES 51-Biological Sci

NAG 3-867 University of Texas at San Antonio 7977
DEVELOPMENT OF ADV METHODOLOGIES FOR PROBABILISTIC
RELATIONSHIPS OF MATERIALS
Period Obligations
01/19/1988-07/06/1995 FY94: \$0 TOTAL: \$221,416
Prin. Invest. NASA Tech. Officer CASE Category
L BOYCE LERC/C C CHAMIS 41-Aero Engr
LERC/R H JOHNS

NAG 9-554 University of Texas at San Antonio 7978
FUNDAMENTAL SKILLS INTELLIGENT TUTORING SYSTEMS
Period Obligations
09/19/1991-01/31/1995 FY94: \$96,544 TOTAL: \$329,888
Prin. Invest. NASA Tech. Officer CASE Category
W ALTER JSC/J D ATKINSON 29-Math/Computer, NEC
R DIEM

NAGW 3573 University of Texas at San Antonio 7979
TEXAS PREFRESHMAN ENGINEERING PROGRAM
Period Obligations
06/03/1993-05/31/1995 FY94: \$277,984 TOTAL: \$352,537
Prin. Invest. NASA Tech. Officer CASE Category
M BERRIOZABAL HQ/B WHITE 49-Engr, NEC

NAGW 4114 University of Texas at San Antonio 7980
ADVANCED PROPULSION STUDIES
Period Obligations
08/18/1994-08/31/1997 FY94: \$398,038 TOTAL: \$398,038
Prin. Invest. NASA Tech. Officer CASE Category
L BOYCE HQ/B L WHITE 42-Astro Engr

NCC 2-724 University of Texas at San Antonio 7981
DURABILITY OF COMPOSITES: THE FURTHER DEVELOPMENT OF
CONSTITUTIVE AND FAILURE LAWS
Period Obligations
07/03/1991-05/31/1993 FY94: \$0 TOTAL: \$227,697
Prin. Invest. NASA Tech. Officer CASE Category
H F BRINSON ARC/H G NELSON 47-Materials Engr
C HIEL

NGT 00-090-047 University of Texas at San Antonio 7982
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
08/22/1991-08/31/1994 FY94: \$0 TOTAL: \$108,488
Prin. Invest. NASA Tech. Officer CASE Category
L VALERDE HQ/B WHITE 49-Engr, NEC

NGT 00-090-099 University of Texas at San Antonio 7983
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/24/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. NASA Tech. Officer CASE Category
L R WILLIAMS HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-100 University of Texas at San Antonio 7984
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period Obligations
09/24/1992-08/14/1995 FY94: \$12,000 TOTAL: \$36,000
Prin. Invest. NASA Tech. Officer CASE Category
L R WILLIAMS HQ/D K RUSSELL 99-Multi-Discip

UTAH

NAG 2-687 Brigham Young University 7985
PIONEER VENUS DATA ANALYSIS
Period Obligations
01/08/1991-09/30/1994 FY94: \$0 TOTAL: \$46,130
Prin. Invest. NASA Tech. Officer CASE Category
D E JONES ARC/L E LASHER 11-Astronomy
ARC/R O FIMMEL

**NASA'S UNIVERSITY PROGRAM
UTAH (Continued)**

NAG 2-883 Brigham Young University 7986
CAPSTONE PROGRAM PROJECT
Period *Obligations*
02/17/1994-01/31/1995 FY94: \$15,000 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P CARTER ARC/B W WEBBON 49-Engr, NEC
R TODD ARC/W C LOMAX

NAGW 2461 Brigham Young University 7987
MODEL BASED WIND RETRIEVAL OF WIND FIELD USING SEA SAT
SCATTEROMETER DATA
Period *Obligations*
07/15/1991-09/30/1994 FY94: \$33,263 TOTAL: \$265,225
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D LONG HQ/D ADAMER 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 2612 Brigham Young University 7988
SOFT X-RAY OBSERVATIONS OF THE SUN USING THE SPACE
SHUTTLE
Period *Obligations*
09/09/1991-03/31/1993 FY94: \$0 TOTAL: \$87,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J W MOODY HQ/W WAGNER 13-Physics
HQ/K LANG

NAGW 2875 Brigham Young University 7989
RESEARCH IN OBSERVATIONS OF OCEANIC AIR/SEA INTERA
CTION
Period *Obligations*
02/10/1992-02/14/1995 FY94: \$172,279 TOTAL: \$528,981
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D G LONG HQ/J K ALEXANDER 33-Oceanography
HQ/D A HOLLAND

NGT 00-010-013 Brigham Young University 7990
MULTIDISCIPLINARY DESIGN AND ANALYSIS FELLOWSHIP
PROGRAM
Period *Obligations*
10/27/1993-08/31/1994 FY94: \$49,759 TOTAL: \$49,759
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C D SORENSEN HQ/G S SEIDEL 41-Aero Engr
S P MAGLEBY HQ/J R FACEY
R H TODD

NGT 00-030-198 Brigham Young University 7991
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
08/25/1993-08/31/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D LONG HQ/G ASRAR 33-Oceanography
HQ/D M BUTLER

NAG 1-1232 University of Utah 7992
AIRFOIL PERFORMANCE IN HIGH LIFT/MAXIMUM PERFORM- ANCE
CONFIGURATIONS DURING HEAVY RAIN AND SNOW STORM
Period *Obligations*
02/26/1991-12/31/1994 FY94: \$9,382 TOTAL: \$125,862
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R A DECKER LARC/Z T APPLIN 41-Aero Engr
LARC/G M BEZOS

NAG 1-1314 University of Utah 7993
FARS CIRRUS MEASUREMENT FOR FIRE II
Period *Obligations*
07/23/1991-11/30/1994 FY94: \$90,001 TOTAL: \$217,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K SASSEN LARC/D S MCDUGAL 31-Atmos Sci
LARC/T L OWENS

NAG 1-1379 University of Utah 7994
MULTIAXIAL CHARACTERIZATION OF STIFFNESS AND STRENGTH
OF TEXTILE FIBER COMPOSITES
Period *Obligations*
01/28/1992-01/27/1995 FY94: \$62,100 TOTAL: \$187,157
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S R SWANSON LARC/J R REEDER 47-Materials Engr
LARC/C C POE JR

NAG 2-435 University of Utah 7995
COMPREHENSIVE ANALYSIS OF BONES FROM IMMOBILIZED
AIMMOBILIZED AND REAMBULATED MONKEYS
Period *Obligations*
03/01/1987-02/28/1994 FY94: \$0 TOTAL: \$416,650
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W S JEE ARC/S B ARNAUD 51-Biological Sci

NAG 5-127 University of Utah 7996
GLOBAL SCALE DIAGNOSIS OF SATELLITE DATA
Period *Obligations*
07/01/1981-11/30/1993 FY94: \$0 TOTAL: \$594,647
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J N PAEGLE GSFC/H M HELFAND 31-Atmos Sci

NAG 5-1050 University of Utah 7997
RESEARCH RELATIVE TO SURFACE RADIATION RETRIEVAL
METHODOLOGIES
Period *Obligations*
05/15/1988-02/28/1995 FY94: \$115,000 TOTAL: \$731,700
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K N LIOU GSFC/M D CHOU 31-Atmos Sci

NAG 5-1822 University of Utah 7998
LIMNEOTECTONICS OF ALTIPLANO PALEOLAKES
Period *Obligations*
11/06/1991-11/14/1994 FY94: \$50,000 TOTAL: \$130,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D R CURREY GSFC/B G BILLS 32-Geological Sci

NAG 5-2055 University of Utah 7999
LIMNEOTECTONICS OF THE CANADIAN SHIELD
Period *Obligations*
08/05/1992-09/14/1995 FY94: \$137,280 TOTAL: \$185,682
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D CURREY GSFC/B G BILLS 32-Geological Sci

NAG 5-2200 University of Utah 8000
IMAGE COMPRESSION USING HUMAN VISUAL SYSTEM MODELS ,
WAVELET TRANSFORM CODING AND MASSIVELY
Period *Obligations*
02/23/1993-11/30/1994 FY94: \$30,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V J MATHEWS GSFC/J R FISCHER 22-Computer Science

**NASA'S UNIVERSITY PROGRAM
UTAH (Continued)**

NAG 5-2241 University of Utah 8001
VEGETATION-ATMOSPHERE CO2 AND H2O EXCHANGE PROCESS
ES: STABLE ISOTOPE ANALYSES
Period Obligations
04/08/1993-04/14/1995 FY94: \$121,800 TOTAL: \$176,800
Prin Invest NASA Tech Officer CASE Category
J EHLERINGER GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 5-2338 University of Utah 8002
MARS LIDAR FEASIBILITY MODELING STUDY
Period Obligations
07/27/1993-07/31/1994 FY94: \$0 TOTAL: \$15,000
Prin Invest NASA Tech Officer CASE Category
K SASSEN GSFC/J D SPINHIRNE 31-Atmos Sci
GSFC/J B ABSHIRE

NAG 5-2349 University of Utah 8003
CONSTRAINTS ON GAMMA RAY BURSTER (GRB) SOURCE DIST
ANCES USING GRO/BATSE IN COINCIDENCE WITH
Period Obligations
08/12/1993-02/28/1995 FY94: \$0 TOTAL: \$16,696
Prin Invest NASA Tech Officer CASE Category
D B KIEDA GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2678 University of Utah 8004
RADIATIVE AND CLIMATIC EFFECTS OF CONTRAIL CIRRRUS
Period Obligations
08/24/1994-08/31/1995 FY94: \$5,625 TOTAL: \$5,625
Prin Invest NASA Tech Officer CASE Category
K LIOU GSFC/R W STEWART 31-Atmos Sci

NAGW 1999 University of Utah 8005
MAGPIE, A MAGNETIC PASSIVE ISOTOPE EXPERIMENT
Period Obligations
07/11/1990-02/28/1996 FY94: \$129,997 TOTAL: \$607,973
Prin Invest NASA Tech Officer CASE Category
M H SALAMON HQ/W V JONES 13-Physics
HQ/J C LING

NAGW 3687 University of Utah 8006
INTERMOUNTAIN NETWORK AND SCIENTIFIC COMPUTATION C
ENTER
Period Obligations
09/09/1993-07/31/1996 FY94: \$9,028,338 TOTAL: \$9,974,105
Prin Invest NASA Tech Officer CASE Category
R PUGMIRE HQ/W C STAMPER 99-Multi-Discip

NAS 1-18883 University of Utah 8007
EFFECTS OF MATRIX AND INTERPHASE ON CARBON FIBER
COMPOSITE COMPRESSION STRENGTH
Period Obligations
03/28/1989-03/30/1994 FY94: TOTAL: \$390,056
Prin Invest NASA Tech Officer CASE Category
W D BASCOM LERC/J A HINKLEY 46-Mech Engr
LERC/J H CREWS

NCC 1-189 University of Utah 8008
IMPROVEMENT AND APPLICATION OF THE UU RADIATION PA
RAMETERIZATION PROGRAM
Period Obligations
05/25/1994-04/30/1995 FY94: \$49,700 TOTAL: \$49,700
Prin Invest NASA Tech Officer CASE Category
K N LIOU LARC/T P CHARLOCK 31-Atmos Sci
Q FU LARC/B A WIELICKY

NCC 2-851 University of Utah 8009
WASTE INCINERATION FOR RESOURCE RECOVERY IN REGENE
RATIVE LIFE SUPPORT SYSTEMS
Period Obligations
04/15/1994-09/30/1996 FY94: \$364,081 TOTAL: \$364,081
Prin Invest NASA Tech Officer CASE Category
J S LIGHTLY ARC/R D MACELROY 59-Life Sci, NEC
D W PERSHING

NCC 2-5007 University of Utah 8010
THE IMPACT OF COCKPIT AUTOMATION ON PILOT PROFICIE NCY
Period Obligations
10/29/1993-10/31/1995 FY94: \$39,842 TOTAL: \$39,842
Prin Invest NASA Tech Officer CASE Category
R DECKER ARC/B KANKI 69-Psych, NEC

NGT 00-030-257 University of Utah 8011
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period Obligations
09/20/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin Invest NASA Tech Officer CASE Category
D CHAPMAN HQ/M BALTUCK 99-Multi-Discip
HQ/G ASRAR

NAG 1-1334 Utah State University 8012
COORDINATED UARS AND GROUND-BASED MEASUREMENTS OF
AIRGLOW, WINDS AND WAVES OF THE MIDDLE ATMOSPHERE
Period Obligations
08/28/1991-06/30/1995 FY94: \$48,024 TOTAL: \$278,302
Prin Invest NASA Tech Officer CASE Category
P J ESPY LARC/J G WELLS 31-Atmos Sci

NAG 1-1335 Utah State University 8013
CORRELATIVE ATMOSPHERIC SPECIES, TEMPERATURE,
DISTURBANCES AND ENERGY INPUT MEASUREMENTS
Period Obligations
08/28/1991-07/31/1994 FY94: \$25,000 TOTAL: \$165,000
Prin Invest NASA Tech Officer CASE Category
B WICKWAR LARC/J G WELLS 31-Atmos Sci
R J SICA
D REES

NAG 2-874 Utah State University 8014
TEST FLIGHT OF A NYLON SUPER-PRESSURE BALLOON IN M
ARS-LIKE CONDITIONS ON EARTH
Period Obligations
11/04/1993-09/30/1994 FY94: \$44,537 TOTAL: \$44,537
Prin Invest NASA Tech Officer CASE Category
J CANTRELL ARC/R M HABERLE 41-Aero Engr
ARC/L G LEMKE

NAG 5-672 Utah State University 8015
SUBORBITAL PROGRAM MAGNETOSPHERIC/IONOSPHERIC
Period Obligations
07/30/1990-06/30/1995 FY94: \$35,000 TOTAL: \$72,000
Prin Invest NASA Tech Officer CASE Category
B G FEJER GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-686 Utah State University 8016
ROCKET PROBE MEASUREMENTS OF MESOSPHERIC ELECTRON
DENSITY BITE-OUTS AND TURBULENCE
Period Obligations
05/29/1991-12/31/1994 FY94: \$0 TOTAL: \$145,856
Prin Invest NASA Tech Officer CASE Category
J C ULWICK GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NASA'S UNIVERSITY PROGRAM

UTAH (Continued)

NAG 5-1484	Utah State University	8017	THE FLOW OF PLASMA IN THE SOLAR TERRESTRIAL ENVIRONMENT
<i>Period</i> 11/26/1990-12/31/1994	<i>Obligations</i> FY94: \$271,390	<i>TOTAL</i> : \$1,031,390	<i>Prin. Invest.</i> R W SCHUNK <i>NASA Tech. Officer</i> GSFC/T J BIRMINGHAM <i>CASE Category</i> 13-Physics
NAG 5-1546	Utah State University	8018	THE EFFECTS OF WAVE-PARTICLE INTERACTIONS ON ION OUTFLOW AT HIGH LATITUDES
<i>Period</i> 04/17/1991-04/30/1994	<i>Obligations</i> FY94: \$0	<i>TOTAL</i> : \$135,000	<i>Prin. Invest.</i> A R BARAKAT <i>NASA Tech. Officer</i> GSFC/G D BULLOCK <i>CASE Category</i> 19-Phys Sci, NEC
NAG 5-2043	Utah State University	8019	MESOSCALE STUDY OF SURFACE HEAT FLUXES AND BOUNDARY LAYER PROCESSES IN A DESERT REGION
<i>Period</i> 07/28/1992-08/14/1995	<i>Obligations</i> FY94: \$105,118	<i>TOTAL</i> : \$345,144	<i>Prin. Invest.</i> C BINGHAM <i>NASA Tech. Officer</i> GSFC/E T ENGMAN <i>CASE Category</i> 39-Env Sci, NEC
NAG 5-5022	Utah State University	8020	AN INVESTIGATION OF THE EFFECTS OF MESOSPHERIC AEROSOLS ON THE ODD-OXYGEN CHEM AND DISTRIBUTION
<i>Period</i> 04/13/1994-02/28/1995	<i>Obligations</i> FY94: \$147,459	<i>TOTAL</i> : \$147,459	<i>Prin. Invest.</i> P J ESPY <i>NASA Tech. Officer</i> GSFC/L J EARLY <i>CASE Category</i> 13-Physics <i>GSFC/R H PLESS</i>
NAG 8-897	Utah State University	8021	IMPROVEMENT AND FURTHER DEVELOPMENT OF SSM/I OVERLAND PARAMETER ALGORITHMS USING THE WETNET WORKST
<i>Period</i> 11/04/1991-11/04/1994	<i>Obligations</i> FY94: \$47,440	<i>TOTAL</i> : \$182,786	<i>Prin. Invest.</i> J J MCDONNELL <i>NASA Tech. Officer</i> MSFC/J C LUVALL <i>CASE Category</i> 31-Atmos Sci
NAGW 2066	Utah State University	8022	NAGW-2066/UTAH STATE UNIV/PROPOSAL TO COMPLETE THE DATA ANALYSIS OF LDEF EXPERIMENT A0038
<i>Period</i> 06/08/1990-02/28/1994	<i>Obligations</i> FY94: \$0	<i>TOTAL</i> : \$90,400	<i>Prin. Invest.</i> D D LIND <i>NASA Tech. Officer</i> HQ/W V JONES <i>CASE Category</i> 13-Physics <i>HQ/J C LING</i>
NAGW 2103	Utah State University	8023	NAGW-2103/UTAH STATE UNIV/SATELLITE STUDIES OF LOW LATITUDE IONOSPHERIC PLASMA DRIFTS
<i>Period</i> 05/09/1990-03/31/1995	<i>Obligations</i> FY94: \$62,543	<i>TOTAL</i> : \$280,197	<i>Prin. Invest.</i> B G FEJER <i>NASA Tech. Officer</i> HQ/M M MELLOTT <i>CASE Category</i> 13-Physics <i>HQ/T PERRY</i>
NAGW 2852	Utah State University	8024	NAGW-2852/UTAH STATE UNIV/STUDY OF IN SITU EVIDENCE OF ALFVEN'S CRITICAL IONIZATION VELOCITY EFFECT
<i>Period</i> 01/31/1992-03/31/1994	<i>Obligations</i> FY94: \$0	<i>TOTAL</i> : \$34,942	<i>Prin. Invest.</i> C SWENSON <i>NASA Tech. Officer</i> HQ/D L REASONER <i>CASE Category</i> 13-Physics <i>HQ/J D BOHLIN</i>
NAGW 3029	Utah State University	8025	SPACE DYNAMICS LABORATORY PROJECT
<i>Period</i> 04/09/1992-09/30/1994	<i>Obligations</i> FY94: \$0	<i>TOTAL</i> : \$10,000,000	<i>Prin. Invest.</i> W WATKINS <i>NASA Tech. Officer</i> HQ/R SPILLINGER <i>CASE Category</i> 31-Atmos Sci
NAGW 3221	Utah State University	8026	NAGW-3221/UTAH STATE UNIV/SPECIAL SENSOR MICROWAVE L IMAGE PATHFINDER ACTIVITIES
<i>Period</i> 11/02/1992-09/14/1993	<i>Obligations</i> FY94: \$0	<i>TOTAL</i> : \$14,318	<i>Prin. Invest.</i> C M NEALE <i>NASA Tech. Officer</i> HQ/M E MAIDEN <i>CASE Category</i> 39-Env Sci, NEC <i>HQ/D M BUTLER</i>
NAGW 3567	Utah State University	8027	A GENERAL TRANSPORT MODEL OF PLASMA FLOW IN SATURN'S INNER MAGNETOSPHERE
<i>Period</i> 05/14/1993-04/30/1994	<i>Obligations</i> FY94: \$0	<i>TOTAL</i> : \$49,500	<i>Prin. Invest.</i> H G DEMARS <i>NASA Tech. Officer</i> HQ/E C WHIPPLE <i>CASE Category</i> 13-Physics <i>HQ/G L WITHBROE</i>
NAGW 3689	Utah State University	8028	ANALYSIS OF ION-MODE MEASUREMENTS BY THE PIONEER V ENUS RETARDING POTENTIAL ANALYZER
<i>Period</i> 08/18/1993-05/31/1995	<i>Obligations</i> FY94: \$43,200	<i>TOTAL</i> : \$103,200	<i>Prin. Invest.</i> K L MILLER <i>NASA Tech. Officer</i> HQ/J T BERGSTRAHL <i>CASE Category</i> 31-Atmos Sci
NAGW 3999	Utah State University	8029	MID-LATITUDE POTENTIAL DISTRIBUTION DEFINED BY THE ERMAL PLASMA MOTIONS
<i>Period</i> 05/09/1994-04/30/1996	<i>Obligations</i> FY94: \$60,500	<i>TOTAL</i> : \$60,500	<i>Prin. Invest.</i> D J CRAIN <i>NASA Tech. Officer</i> HQ/M M MELLOTT <i>CASE Category</i> 31-Atmos Sci <i>HQ/J D BOHLIN</i>
NAGW 4057	Utah State University	8030	MOLECULAR CALCULATIONS IN SUPPORT OF PLANETARY ATMOSPHERE PROGRAMS
<i>Period</i> 07/19/1994-04/30/1996	<i>Obligations</i> FY94: \$58,646	<i>TOTAL</i> : \$58,646	<i>Prin. Invest.</i> R WATTSON <i>NASA Tech. Officer</i> HQ/H H BRINTON <i>CASE Category</i> 31-Atmos Sci
NAG10-73	Utah State University	8031	DEVELOPMENTAL STUDIES OF WHEAT IN MICROGRAVITY
<i>Period</i> 06/01/1990-02/28/1994	<i>Obligations</i> FY94: \$0	<i>TOTAL</i> : \$531,374	<i>Prin. Invest.</i> F B SALISBURY <i>NASA Tech. Officer</i> KSC/W M KNOTT <i>CASE Category</i> 13-Physics
NAG10-140	Utah State University	8032	REGULATION OF CELL WALL POLYMERS IN MICROGRAVITY
<i>Period</i> 06/29/1994-06/28/1995	<i>Obligations</i> FY94: \$136,277	<i>TOTAL</i> : \$136,277	<i>Prin. Invest.</i> E E HOOD <i>NASA Tech. Officer</i> KSC/W M KNOTT <i>CASE Category</i> 51-Biological Sci

NASA'S UNIVERSITY PROGRAM **UTAH (Continued)**

NAS 1-19418 **Utah State University** **8033**
JOINT DAMPING EXPERIMENT
Period *Obligations*
08/19/1991-12/18/1995 FY94: \$198,000 TOTAL: \$507,946
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S L FOLKMAN LARC/M S LAKE 46-Mech Engr
LARC/W B FICHTER

NAS 1-20080 **Utah State University** **8034**
SOUNDING OF THE ATMOSPHERE USING BROADBAND RADIOMETRY (SABER)
Period *Obligations*
02/08/1994-02/08/1995 FY94: \$270,750 TOTAL: \$270,750
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R ESPLIN LARC/R E CAMPBELL 31-Atmos Sci
J C BATLY

NAS 8-37110 **Utah State University** **8035**
STUDY ENTITLED "RESEARCH ON ORBITAL PLASMA-ELECTRODYNAMICS."
Period *Obligations*
05/04/1987-02/28/1997 FY94: \$11,000 TOTAL: \$61,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N STONE MSFC/K HOLDER 31-Atmos Sci
K W SCHUNK MSFC/B DUNCAN

NCA 2-662 **Utah State University** **8036**
ASSESSMENT OF RESEARCH CAPABILITY FOR LIFE SUPPORT IN SPACE
Period *Obligations*
09/23/1991-03/22/1993 FY94: \$0 TOTAL: \$15,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B BUGBEE ARC/W BERRY 59-Life Sci, NEC
ARC/P CHENG

NCC 2-139 **Utah State University** **8037**
STUDIES ON MAXIMUM YIELD OF WHEAT AND OTHER SMALL GRAIN IN CONTROLLED ENVIRONMENTS
Period *Obligations*
05/01/1981-03/31/1995 FY94: \$141,550 TOTAL: \$1,647,646
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F B SALISBURY ARC/R D MACELROY 51-Biological Sci
B BUGBEE

NCC 2-831 **Utah State University** **8038**
SEED-TO-SEED EXPERIMENT (EXPERIMENTS ON RUSSIAN SPACE STATION MIR)
Period *Obligations*
10/26/1993-09/30/1994 FY94: \$1,258,806 TOTAL: \$1,258,806
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F B SALISBURY ARC/G C JAHNS 55-Agriculture Sci
G E BINGHAM ARC/C M WINGET
D L BUBENHEIM

NCC 2-5039 **Utah State University** **8039**
STUDY OF SUBSTRATES FOR USE IN MICROGRAVITY
Period *Obligations*
03/01/1994-03/31/1996 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G BINGHAM ARC/G BINGHAM 55-Agriculture Sci

NCC 2-5075 **Utah State University** **8040**
DEVELOPMENT AND VALIDATION OF A CANOPY TRANSPIRATION MODEL FOR CONTROLLED ENVIRONMENTS
Period *Obligations*
06/30/1994-06/30/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B BUGBEE ARC/A C MCCORMACK 55-Agriculture Sci

NGT 00-040-014 **Utah State University** **8041**
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
10/04/1989-01/31/1995 FY94: \$350,000 TOTAL: \$1,743,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F J REDD HQ/E T SCHWARTZ 99-Multi-Discip
D J BAKER

NAG 9-496 **Utah Valley Community College** **8042**
HYPERVELOCITY DRAG ACCELERATOR
Period *Obligations*
03/15/1991-04/01/1995 FY94: \$0 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T W LEE JSC/J L CREWS 19-Phys Sci, NEC

NAG 8-214 **Weber State College** **8043**
JOVE
Period *Obligations*
01/09/1992-07/15/1994 FY94: \$0 TOTAL: \$60,345
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D M VAUGHN MSFC/F SIX 39-Env Sci, NEC

VERMONT

NAG 5-1668 **Middlebury College** **8044**
DETAILED X-RAY IMAGES OF THE SN 1006 SUPERNOVA REMNANT
Period *Obligations*
06/27/1991-12/31/1995 FY94: \$40,000 TOTAL: \$65,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P F WINKLER GSFC/R PETRE 11-Astronomy

NAGW 2141 **Middlebury College** **8045**
NAGW-2141/MIDDLEBURY COLLEGE/CURRENT SHEET FORMATION AND LOSS OF EQUILIBRIUM
Period *Obligations*
08/08/1990-09/30/1994 FY94: \$44,356 TOTAL: \$172,553
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R WOLFSON HQ/J D BOHLIN 13-Physics
HQ/S KANE

NAG 8-238 **Norwich University** **8046**
JOVE
Period *Obligations*
06/19/1992-04/02/1995 FY94: \$18,000 TOTAL: \$45,947
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W TIMOSZYK MSFC/F SIX 13-Physics

NAG 9-312 **Norwich University** **8047**
MULTIPROCESSOR TECHNIQUES IN DATA ACQUISITION
Period *Obligations*
08/23/1988-12/01/1994 FY94: \$0 TOTAL: \$124,916
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P N BARTRAM JSC/D STILWELL 22-Computer Science

**NASA'S UNIVERSITY PROGRAM
VERMONT (Continued)**

NAG 8-1006 Univ of Vermont & St Agricultural Col. 8048
JOVE
Period Obligations
12/03/1993-05/31/1995 FY94: \$41,000 TOTAL: \$41,000
Prin. Invest. NASA Tech. Officer CASE Category
Y YU MSFC/F SIX 13-Physics

NAGW 3604 Univ of Vermont & St Agricultural Col. 8049
SELF-GENERATED BENDING MOMENTS IN ROOT GRAVITROPIS M
Period Obligations
05/26/1993-05/31/1995 FY94: \$0 TOTAL: \$20,000
Prin. Invest. NASA Tech. Officer CASE Category
P M LINTILHAC HQ/T W HALSTEAD 51-Biological Sci

NGT 00-040-054 Univ of Vermont & St Agricultural Col. 8050
NGT-40054/UNIV VERMONT/NATIONAL SPACE GRANT COLLEG E
AND FELLOWSHIP PROGRAM
Period Obligations
05/29/1992-01/31/1995 FY94: \$170,000 TOTAL: \$493,000
Prin. Invest. NASA Tech. Officer CASE Category
W D LAKIN HQ/L KEFFER 99-Multi-Discip
T S KELLER

VIRGINIA

NAG 1-796 Christopher Newport University 8051
SPECTROSCOPY OF TUNABLE SOLID STATE LASER MATERIAL S
Period Obligations
07/09/1987-03/31/1995 FY94: \$0 TOTAL: \$764,304
Prin. Invest. NASA Tech. Officer CASE Category
A M BUONCRISTIANI LARC/P BROCKMAN 13-Physics
LARC/R V HESS

NAG 1-1242 Christopher Newport University 8052
CHARACTERIZING AND TESTING A THERMALLY ISOLATING
SUPERCONDUCTING LINK FOR SAFIRE-LIKE MISSIONS
Period Obligations
03/27/1991-06/30/1995 FY94: \$0 TOTAL: \$117,279
Prin. Invest. NASA Tech. Officer CASE Category
R SELIM LARC/F ALLAMBY 47-Materials Engr
R CATON LARC/S WISE

NAG 1-1286 Christopher Newport University 8053
SHIELDING FROM SPACE RADIATION
Period Obligations
05/15/1991-06/30/1993 FY94: \$0 TOTAL: \$163,621
Prin. Invest. NASA Tech. Officer CASE Category
C K CHANG LARC/J L SHINN 13-Physics
LARC/W E MEADOR

NAG 1-1439 Christopher Newport University 8054
HIGH SPEED DATA ENCODING/DECODING
Period Obligations
05/18/1992-07/31/1994 FY94: \$14,942 TOTAL: \$47,443
Prin. Invest. NASA Tech. Officer CASE Category
R F HODSON LARC/S G JURCZYK 45-Elec Engr
LARC/T A SHULL

NAG 1-1443 Christopher Newport University 8055
OPTICAL FIBER SPECTROSCOPY
Period Obligations
06/16/1992-12/31/1994 FY94: \$27,371 TOTAL: \$84,511
Prin. Invest. NASA Tech. Officer CASE Category
A M BUONCRISTIANI LARC/R S ROGOWSKI 45-Elec Engr

NAGW 3736 Christopher Newport University 8056
CONTROLS ON METHANE EMISSIONS FROM VEGETATED WETLA
NDS
Period Obligations
09/09/1993-06/30/1995 FY94: \$100,000 TOTAL: \$150,000
Prin. Invest. NASA Tech. Officer CASE Category
G J WHITING HQ/D E WICKLAND 39-Env Sci, NEC
J CHANTON HQ/A C JANETOS

NCC 1-178 Christopher Newport University 8057
SHIELDING FROM SPACE RADIATIONS NLPN 93-313
Period Obligations
04/13/1993-01/31/1995 FY94: \$72,513 TOTAL: \$177,611
Prin. Invest. NASA Tech. Officer CASE Category
C K CHANG LARC/J L SHINN 13-Physics
LARC/E J CONWAY

NCC 1-179 Christopher Newport University 8058
SPECTROSCOPY OF SOLID STATE LASER MATERIALS
Period Obligations
04/23/1993-01/15/1994 FY94: \$20,821 TOTAL: \$85,811
Prin. Invest. NASA Tech. Officer CASE Category
A M BUONCRISTIANI LARC/C P RINSLAND 31-Atmos Sci

NGT 00-090-156 Christopher Newport University 8059
SCHOOL SCIENCE COMES ALIVE
Period Obligations
01/13/1993-01/14/1995 FY94: \$0 TOTAL: \$54,180
Prin. Invest. NASA Tech. Officer CASE Category
F HARTLINE LARC/R LANG 99-Multi-Discip
G WEBB HQ/B WHITE

NAG 1-237 College of William And Mary 8060
CHARACTERIZATION OF RELATIONSHIP OF CURE CYCLE
PROCESSING PROPERTIES
Period Obligations
11/05/1981-11/30/1995 FY94: \$50,696 TOTAL: \$828,301
Prin. Invest. NASA Tech. Officer CASE Category
D E KRANBUEHL LARC/E R LONG 12-Chemistry
LARC/B DEXTER

NAG 1-884 College of William And Mary 8061
TOWARD A PRACTICAL THEORY OF ULTRA-RELIABLE SOFWA RE
Period Obligations
05/18/1988-12/31/1994 FY94: \$22,395 TOTAL: \$386,231
Prin. Invest. NASA Tech. Officer CASE Category
K W MILLER LARC/D E ECKHARDT 22-Computer Science
R E NOONAN
S K PARK

NAG 1-995 College of William And Mary 8062
A STUDY OF THE PARALLELIZATION OF ERBE DATA PROCES
SING
Period Obligations
04/14/1989-05/31/1993 FY94: TOTAL: \$176,520
Prin. Invest. NASA Tech. Officer CASE Category
D M NICHOL LARC/R J KEYNTON 22-Computer Science
LARC/J W YOUNGBLOOD

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NAG 1-1019 College of William And Mary 8063 FREQUENCY DEPENDENT ELECTROMAGNETIC SENSING FOR IN SITU MONITORING OF HIGH PERFORMANCE THERMOSET AND <i>Period</i> <i>Obligations</i> 06/01/1989-06/30/1994 FY94: \$0 TOTAL: \$335,430 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D E KRANBUEHL LARC/E R LONG 12-Chemistry	NAG 1-1597 College of William And Mary 8071 TECHNOLOGIES FOR NONDESTRUCTIVE EVALUATION OF SURFACES AND THIN LAYERS <i>Period</i> <i>Obligations</i> 03/22/1994-12/31/1994 FY94: \$174,606 TOTAL: \$174,606 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D M MANOS LARC/K E CRAMER 13-Physics LARC/W T YOST
NAG 1-1060 College of William And Mary 8064 PARALLELIZATION OF PERFORMABILITY DESIGN TOOLS <i>Period</i> <i>Obligations</i> 09/14/1989-12/31/1992 FY94: TOTAL: \$57,315 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D M NICHOL LARC/W H BRYANT 22-Computer Science	NAS 1-18347 College of William And Mary 8072 PHYSICAL, MATHEMATICAL, AND COMPUTER SCIENCE RESEARCH <i>Period</i> <i>Obligations</i> 01/13/1987-12/31/1992 FY94: TOTAL: \$2,490,709 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D E KRANBUEHL LARC/E J PRIOR 99-Multi-Discip LARC/S E MASSENBERG
NAG 1-1063 College of William And Mary 8065 QUANTITATIVE NONDESTRUCTIVE EVALUATION OF MATERIALS AND STRUCTURES <i>Period</i> <i>Obligations</i> 09/26/1989-01/31/1995 FY94: \$189,596 TOTAL: \$587,609 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> B T SMITH LARC/P H JOHNSTON 13-Physics	NAS 1-19656 College of William And Mary 8073 PHYSICAL, MATHEMATICAL, AND COMPUTER SCIENCE RESEA RCH <i>Period</i> <i>Obligations</i> 08/05/1992-08/05/1998 FY94: \$801,182 TOTAL: \$2,068,485 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> LARC/E J PRIOR 19-Phys Sci, NEC C S WELCH LARC/R L YANG M C WU
NAG 1-1132 College of William And Mary 8066 A RELIABILITY ESTIMATION SYSTEM TESTBED <i>Period</i> <i>Obligations</i> 04/19/1990-05/15/1995 FY94: \$60,000 TOTAL: \$195,000 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D M NICOL LARC/D L PALUMBO 29-Math/Cmputer,NEC	NCC 1-40 College of William And Mary 8074 TIRE NONLINEAR MODEL <i>Period</i> <i>Obligations</i> 03/25/1980-06/30/1994 FY94: \$30,000 TOTAL: \$935,778 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> C M ANDERSON LARC/J A TANNER 46-Mech Engr LARC/M P ROBINSON
NAG 1-1548 College of William And Mary 8067 DEGRADATION STUDIES ON MATRIX/FIBER REINFORCED COM POSITE MATERIALS FOR THE HIGH SPEED RESEARCH PROG <i>Period</i> <i>Obligations</i> 10/21/1993-10/31/1994 FY94: \$25,273 TOTAL: \$25,273 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> R A OKWALL LARC/P R YOUNG 12-Chemistry	NCC 1-43 College of William And Mary 8075 HALOE SCIENCE INVESTIGATION <i>Period</i> <i>Obligations</i> 07/16/1980-12/31/1994 FY94: \$130,086 TOTAL: \$1,027,975 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D C BENNER LARC/J PARK 31-Atmos Sci LARC/J M RUSSELL
NAG 1-1574 College of William And Mary 8068 NUMERICAL MODELING OF DISPLACEMENT FIELD FOR SHEAR OGRAPHIC NONDESTRUCTIVE INSPECTION OF AGING A/C <i>Period</i> <i>Obligations</i> 12/16/1993-12/31/1994 FY94: \$55,000 TOTAL: \$55,000 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D KISHONI LARC/R S ROGOWSKI 46-Mech Engr	NCC 1-80 College of William And Mary 8076 HIGH RESOLUTION SPECTROSCOPY TO SUPPORT ATMOSPHERIC MEASUREMENTS <i>Period</i> <i>Obligations</i> 07/18/1983-03/31/1995 FY94: \$99,623 TOTAL: \$867,675 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D C BENNER LARC/M A SMITH 13-Physics M D VENKATARAMAN LARC/C P RINSLAND
NAG 1-1575 College of William And Mary 8069 FIBER OPTIC CHEMICAL SENSING <i>Period</i> <i>Obligations</i> 12/16/1993-12/31/1994 FY94: \$68,919 TOTAL: \$68,919 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D M MANOS LARC/R S ROGOWSKI 13-Physics	NCC 1-126 College of William And Mary 8077 THE EFFECTS OF THE INTERACTION OF POLYMERIC MATERIALS WITH THE SPACE ENVIRONMENT <i>Period</i> <i>Obligations</i> 06/16/1988-12/31/1992 FY94: TOTAL: \$84,526 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> R L KIEFER LARC/S T LONG 12-Chemistry R A ORWOLL LARC/G M WOOD
NAG 1-1585 College of William And Mary 8070 FRONT-SURFACE CHARACTERIZATION OF SUB-SURFACE STRUCTURES AND DEFECTS NLPN 93-1020 <i>Period</i> <i>Obligations</i> 01/05/1994-01/04/1995 FY94: \$224,145 TOTAL: \$224,145 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D M MANOS LARC/P H JOHNSTON 13-Physics	NCC 1-150 College of William And Mary 8078 DEVELOPMENT OF ADVANCED POLYMERIC ADHESIVES AND FABRICATION AND EVALUATION OF COMPOSITE MATERIALS <i>Period</i> <i>Obligations</i> 03/08/1991-12/31/1994 FY94: \$261,981 TOTAL: \$631,536 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> R A ORWOLL LARC/T L ST. CLAIR 99-Multi-Discip

NASA'S UNIVERSITY PROGRAM VIRGINIA (Continued)

NCC 1-151	College of William And Mary		8079
	SHIELDING MATERIALS FOR HIGHLY PENETRATING SPACE RADIATIONS		
	<i>Period</i>	<i>Obligations</i>	
	04/09/1991-12/31/1994	FY94: \$0	TOTAL: \$129,803
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	R L KIEFER	LARC/S A LONG	19-Phys Sci, NEC
	R A ORWOLL		
NCC 1-159	College of William And Mary		8080
	CASE-BASED REASONING ABOUT PHYSICAL SYSTEMS		
	<i>Period</i>	<i>Obligations</i>	
	08/15/1991-02/12/1995	FY94: \$0	TOTAL: \$105,123
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S FEYOCK	LARC/P C SCHUTTE	22-Computer Science
NCC 1-160	College of William And Mary		8081
	INCONGRUITY, INCONGRUITY RESOLUTION AND MENTAL STATES MEASURE AND MODIFICATION OF SITUATIONAL AWARENESS		
	<i>Period</i>	<i>Obligations</i>	
	09/24/1991-05/30/1995	FY94: \$59,490	TOTAL: \$99,490
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	P L DERKS	LARC/A T POPE	69-Psych, NEC
	L S GILLIKIN	LARC/J R COMSTOCK	
NGT 00-051-008	College of William And Mary		8082
	GSRP		
	<i>Period</i>	<i>Obligations</i>	
	09/12/1992-08/14/1995	FY94: \$22,000	TOTAL: \$88,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	R ORWELL	LARC/E PRIOR	46-Mech Engr
NGT 00-051-258	College of William And Mary		8083
	GRADUATE STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	06/16/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	R A ORWOLL	LARC/L EVANS	12-Chemistry
NGT 00-070-211	College of William And Mary		8084
	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	06/28/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	R A ORWOLL	HQ/F C OWENS	12-Chemistry
NGT 00-070-247	College of William And Mary		8085
	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	10/28/1991-08/31/1993	FY94: \$0	TOTAL: \$22,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S K PARK	LARC/E J PRIOR	22-Computer Science
NGT 00-070-293	College of William And Mary		8086
	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	08/14/1992-06/30/1994	FY94: \$0	TOTAL: \$44,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	R A ORWOLL	LARC/E PRIOR	41-Aero Engr
NGT 00-070-306	College of William And Mary		8087
	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	05/14/1993-05/31/1996	FY94: \$22,000	TOTAL: \$44,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S FEYOCK	HQ/D K RUSSELL	22-Computer Science
NGT 00-070-381	College of William And Mary		8088
	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	08/31/1994-07/31/1995	FY94: \$22,000	TOTAL: \$22,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S PARK	HQ/D K RUSSELL	22-Computer Science
NAG 2-343	Estrn Va Med Schl-Estrn Va Med Authority		8089
	EFFECTS OF WEIGHTLESSNESS ON AURELIA EPHYRA DIFFERENTIATION		
	<i>Period</i>	<i>Obligations</i>	
	01/01/1985-12/31/1992	FY94: \$0	TOTAL: \$726,218
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	D B SPANGENBERG	ARC/C M WINGET	51-Biological Sci
NAG 2-767	Estrn Va Med Schl-Estrn Va Med Authority		8090
	EFFECTS OF MICROGRAVITY ON AURELIA EPHYRA BEHAVIOR AND DEVELOPMENT		
	<i>Period</i>	<i>Obligations</i>	
	03/03/1992-12/31/1994	FY94: \$131,620	TOTAL: \$363,882
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	D B SPANGENBERG	ARC/C M WINGET	51-Biological Sci
		ARC/R W BALLARD	
NAG 1-1425	George Mason University		8091
	PERCEPTUAL FACTORS THAT INFLUENCE EFFECTIVE USE OF COMPUTER ENHANCED VISUAL DISPLAYS		
	<i>Period</i>	<i>Obligations</i>	
	04/30/1992-04/30/1993	FY94: \$0	TOTAL: \$59,141
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	D LITTMAN	LARC/J R BURLEY	69-Psych, NEC
	D B DAVIS	LARC/S L WILLIAMS	
	S OVERMYER		
NAG 2-907	George Mason University		8092
	A WORKSHOP ON THE VIABILITY OF HALOPHILIC BACTERIA IN ANCIENT SALT DEPOSITS		
	<i>Period</i>	<i>Obligations</i>	
	06/15/1994-02/28/1995	FY94: \$27,800	TOTAL: \$27,800
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	H MOROWITZ	ARC/L I HOCHSTEIN	51-Biological Sci
NAG 3-1397	George Mason University		8093
	A PROPOSAL FOR FURTHER INVESTIGATION OF MODIFIED BARRIER FUNCTION METHODS FOR SOLVING STRUCT OPT PR		
	<i>Period</i>	<i>Obligations</i>	
	12/22/1992-01/30/1995	FY94: \$49,404	TOTAL: \$89,358
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	R A POLYAK	LERC/L BERKE	21-Mathematics
NAG 5-1495	George Mason University		8094
	HOLOGEN LAMP ANNEALING OF AMORPHOUS/POLY MATERIALS		
	<i>Period</i>	<i>Obligations</i>	
	01/28/1991-05/14/1993	FY94: \$0	TOTAL: \$110,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	E D COLE	GSFC/L R PURVES	47-Materials Engr

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NAG 5-2025 George Mason University 8095
HIGH-ENERGY EMISSION FROM HOT ACCRETION DISKS IN ACTIVE GALACTIC NUCLEI
Period Obligations
07/17/1992-01/31/1996 FY94: \$66,400 TOTAL: \$151,283
Prin. Invest NASA Tech. Officer CASE Category
M KAFATOS GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NAG 5-2247 George Mason University 8096
SUSTAINING ENGINEERING: LIFE CYCLE SUPPORT FOR EVOLUTIONARY SOFTWARE DEVELOPMENT
Period Obligations
04/14/1993-12/14/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest NASA Tech. Officer CASE Category
H GOMMA GSFC/W TRUSZKOWSKI 22-Computer Science
GSFC/K MUELLER

NAG 5-2320 George Mason University 8097
ROMPS: HALOGEN LAMP ANNEALING OF POLY-CRYSTALLINE SEMICONDUCTORS - A GATEWAY SPECIAL/HITCHHIKER...
Period Obligations
07/15/1993-12/31/1994 FY94: \$40,000 TOTAL: \$69,842
Prin. Invest NASA Tech. Officer CASE Category
E D COLE GSFC/L R PURVES 47-Materials Engr

NAG 5-2327 George Mason University 8098
MODELS OF PARALLEL COMPUTING STRUCTURES UTILIZING HIERARCHICAL HIGH LEVEL COLORED PETRI NETS
Period Obligations
07/15/1993-10/31/1994 FY94: \$0 TOTAL: \$19,998
Prin. Invest NASA Tech. Officer CASE Category
D H SCHAEFER GSFC/J R FISCHER 22-Computer Science
GSFC/J E DORBAND

NAG 5-2360 George Mason University 8099
EUVE OBSERV. OF THE SYMBIOTIC STAR R AQUARI 2) MORPHOLOGY OF THE LOCAL H I VOID AND THE IONIZATION
Period Obligations
08/30/1993-05/31/1995 FY94: \$58,000 TOTAL: \$134,305
Prin. Invest NASA Tech. Officer CASE Category
M KAFATOS GSFC/R OLIVERSEN 11-Astronomy

NAG 5-2442 George Mason University 8100
COBE OBSERVATION AND THE DYNAMICS OF THE INTERPLANETARY DUST
Period Obligations
11/30/1993-06/30/1995 FY94: \$75,803 TOTAL: \$75,803
Prin. Invest NASA Tech. Officer CASE Category
L OZERNOY GSFC/J C MATHER 11-Astronomy
GSFC/E DWEK

NAG 5-2554 George Mason University 8101
PEC: A SCALABLE NETWORK FOR MASSIVELY PARALLEL SYSTEMS
Period Obligations
03/10/1994-03/31/1995 FY94: \$49,996 TOTAL: \$49,996
Prin. Invest NASA Tech. Officer CASE Category
P WANG GSFC/J E DORBAND 22-Computer Science
D QUAMMEN

NAG 5-2652 George Mason University 8102
HIGH PERFORMANCE COMPUTING RESEARCH
Period Obligations
07/06/1994-07/14/1995 FY94: \$213,000 TOTAL: \$213,000
Prin. Invest NASA Tech. Officer CASE Category
R LOHNER GSFC/J R FISCHER 13-Physics
GSFC/S T ZALESAK

NAG 5-2710 George Mason University 8103
CONTINUING THE SEARCH FOR GRAVITATIONAL LENSING ECHOES IN BATSE DATA
Period Obligations
08/26/1994-09/14/1995 FY94: \$38,100 TOTAL: \$38,100
Prin. Invest NASA Tech. Officer CASE Category
R J NEMIROFF GSFC/J P NORRIS 11-Astronomy
GSFC/N WHITE

NCA 2-487 George Mason University 8104
THE ROLE OF AMPHIPHILIC BILAYER VESICLES IN BIOGENESIS
Period Obligations
02/12/1990-02/28/1995 FY94: \$0 TOTAL: \$65,100
Prin. Invest NASA Tech. Officer CASE Category
H MOROWITZ ARC/S CHANG 51-Biological Sci

NCC 5-52 George Mason University 8105
A COLLABORATION BETWEEN GEORGE MASON UNIVERSITY AND NASA FOR THE STUDY OF GAMMA RAY ASTROPHYSICS
Period Obligations
06/22/1993-06/30/1995 FY94: \$149,512 TOTAL: \$194,512
Prin. Invest NASA Tech. Officer CASE Category
M KAFATOS GSFC/J P NORRIS 13-Physics

NAG 5-1742 Hampden-Sydney College 8106
ANALYSIS OF DATA FROM THE EGRET ON THE GRO
Period Obligations
08/15/1991-08/14/1995 FY94: \$62,407 TOTAL: \$213,241
Prin. Invest NASA Tech. Officer CASE Category
D A KNIFFEN GSFC/C E FICHEL 11-Astronomy

NAG 1-905 Hampton University 8107
SYNTHESIS OF MONOMERS WITH PENDENT ETHYNYL GROUPS FOR MODIFIED HIGH PERFORMANCE THERMOPLASTICS
Period Obligations
08/02/1988-03/1/1994 FY94: \$0 TOTAL: \$240,921
Prin. Invest NASA Tech. Officer CASE Category
G NWOKOGU LARC/P M HERGENROTHER 12-Chemistry
LARC/J W CONNELL

NAG 1-948 Hampton University 8108
INVESTIGATIONS INTO THE SHAPE-PRESERVING INTERPOLANTS USING SYMBOLIC COMPUTATION
Period Obligations
12/07/1988-10/31/1993 FY94: \$0 TOTAL: \$135,023
Prin. Invest NASA Tech. Officer CASE Category
M LAM LARC/R E SMITH 21-Mathematics
LARC/J N SHOOSMITH

NAG 1-949 Hampton University 8109
PARALLEL ARCHITECTURES FOR PLANETARY EXPLORATION REQUIREMENTS
Period Obligations
01/12/1989-08/31/1994 FY94: \$0 TOTAL: \$200,757
Prin. Invest NASA Tech. Officer CASE Category
R CEZZAR LARC/W H BRYANT 22-Computer Science
R K SEN LARC/S D YOUNG
R A WILLIS

NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)

NAG 1-1091	Hampton University		8110
	A CENTER FOR SPACEBORNE PHOTONICS		
	<i>Period</i>	<i>Obligations</i>	
	02/26/1990-05/31/1994	FY94: \$0	TOTAL: \$2,773,218
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	D D VENABLE	LARC/E J CONWAY	13-Physics
		LARC/R V HESS	
NAG 1-1168	Hampton University		8111
	INVESTIGATION OF POLYMER LIQUID CRYSTAL		
	<i>Period</i>	<i>Obligations</i>	
	08/24/1990-09/30/1994	FY94: \$110,001	TOTAL: \$417,056
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	K S HAN	LARC/J J SINGH	13-Physics
	A EFTEKHARI	LARC/D R SPRINKLE	
NAG 1-1170	Hampton University		8112
	STEADY AND UNSTEADY THREE-DIMENSIONAL TRANSONIC FLOW COMPUTATIONS BY INTEGRAL EQUATION METHOD		
	<i>Period</i>	<i>Obligations</i>	
	08/24/1990-08/31/1994	FY94: \$0	TOTAL: \$211,206
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	H HU	LARC/E C YATES	41-Aero Engr
NAG 1-1185	Hampton University		8113
	THE AMERICAN INDIAN EDUCATION OPPORTUNITIES PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	09/13/1990-09/30/1995	FY94: \$109,247	TOTAL: \$302,847
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	P F MOLIN	LARC/S E MASSENBERG	99-Multi-Discip
	D D VENABLE		
NAG 1-1636	Hampton University		8114
	INVESTIGATION OF NOX REMOVAL FROM SMALL ENGINE EXHAUST		
	<i>Period</i>	<i>Obligations</i>	
	08/03/1994-08/31/1995	FY94: \$56,753	TOTAL: \$56,753
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	J F AKYURTLU	LARC/G B NORTHAM	43-Chem Engr
NAG 9-333	Hampton University		8115
	RADIATION EFFECTS/MATERIAL SYS DEVICES		
	<i>Period</i>	<i>Obligations</i>	
	01/03/1989-12/31/1994	FY94: \$0	TOTAL: \$345,489
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	A A ADEYIGA	JSC/C HERMAN	19-Phys Sci, NEC
NAGW 2929	Hampton University		8116
	THE RESEARCH CENTER FOR OPTICAL PHYSICS		
	<i>Period</i>	<i>Obligations</i>	
	02/19/1992-12/31/1994	FY94: \$1,573,149	TOTAL: \$3,942,988
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	D D VENABLE	HQ/S E MASSENBERG	13-Physics
		HQ/S HARTMAN	
NAS 1-19935	Hampton University		8117
	RESEARCH IN AIRWAY SCI, ARCH, AND PHYS		
	<i>Period</i>	<i>Obligations</i>	
	01/29/1993-01/28/1999	FY94: \$1,217,350	TOTAL: \$1,711,871
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	N	LARC/R L YANG	99-Multi-Discip
		LARC/E J PRIOR	
NCC 1-166	Hampton University		8118
	NASA LANGLEY AEROSPACE RESEARCH SUMMER SCHOLARS PROGRAM (LARSS)		
	<i>Period</i>	<i>Obligations</i>	
	05/28/1992-05/31/1993	FY94:	TOTAL: \$400,742
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	D D VENABLE	LARC/R L YANG	49-Engr, NEC
	J SPENCER		
NGT47-20800	Hampton University		8119
	SUMMER FACULTY FELLOWSHIP PROGRAM IN RESEARCH		
	<i>Period</i>	<i>Obligations</i>	
	01/01/1982-03/31/1995	FY94: \$715,724	TOTAL: \$3,073,395
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	J W SPENCER	HQ/A S MCGEE	49-Engr, NEC
		HQ/E T SCHWARTZ	
NAG 1-627	Longwood College		8120
	FLOW IN COMPOUNDS THAT MODEL CRYSTAL GROWTH IN BREGMAN FURNACES		
	<i>Period</i>	<i>Obligations</i>	
	12/18/1985-12/31/1994	FY94: \$29,172	TOTAL: \$342,012
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	P G BARBER	LARC/A L FRIPP	47-Materials Engr
NAG 1-1185	Hampton University		8113
	THE AMERICAN INDIAN EDUCATION OPPORTUNITIES PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	09/13/1990-09/30/1995	FY94: \$109,247	TOTAL: \$302,847
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	P F MOLIN	LARC/S E MASSENBERG	99-Multi-Discip
	D D VENABLE		
NAG 1-764	Norfolk State University		8121
	SOLUTION OF ELLIPTIC PARTIAL DIFFERENTIAL EQUATION ON A MULTIPROCESSING		
	<i>Period</i>	<i>Obligations</i>	
	04/21/1987-04/30/1993	FY94: \$0	TOTAL: \$381,603
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S N SHAH	LARC/J J LAMBIOTTE	29-Math/Computer, NEC
		LARC/J N SHOOSMITH	
NAG 1-845	Norfolk State University		8122
	SPECTROSCOPIC ANALYSIS AND CHARACTERIZATION OF THE OPTICAL PROPERTIES OF GROUP I-III-VI2 CRYSTALS		
	<i>Period</i>	<i>Obligations</i>	
	01/27/1988-12/31/1992	FY94: \$0	TOTAL: \$314,202
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	G E MILLER	LARC/J C BARNES	13-Physics
NAG 1-1432	Norfolk State University		8123
	DEVELOPMENT OF LABORATORY EXPERIMENTS FOR ENGINEERING MATERIALS, SCIENCE, AND TECHNOLOGY		
	<i>Period</i>	<i>Obligations</i>	
	04/23/1992-12/31/1994	FY94: \$50,000	TOTAL: \$70,001
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	J A JACOBS	LARC/J E GARDNER	49-Engr, NEC
		LARC/R L YANG	
NAG 1-1453	Norfolk State University		8124
	THE GROWTH, SYNTHESIS, AND SPECTROSCOPIC CHARACTERIZATION OF MATERIALS - NLPN 92-207R		
	<i>Period</i>	<i>Obligations</i>	
	09/11/1992-10/10/1994	FY94: \$185,000	TOTAL: \$392,227
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	L MATTIX	LARC/P R YOUNG	12-Chemistry
	H R RIES	LARC/N BARNES	

NASA'S UNIVERSITY PROGRAM **VIRGINIA (Continued)**

NAG 1-1513 **Norfolk State University** **8125**
 THE INVESTIGATION OF RADIATIVE PROPERTIES OF MOLECULAR
 IONS NLPN 93-409
Period *Obligations*
 07/27/1993-08/31/1994 FY94: \$45,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G E MILLER LARC/J H LEE 13-Physics
 K D SONG LARC/W E MEADOR

NAG 1-1536 **Norfolk State University** **8126**
 PCI METHODS FOR SOLVING ADVECTIVE DIFFUSION EQUA- TIONS
 ON A MULTIPROCESSING SYSTEM USING SWARTZ
Period *Obligations*
 08/23/1993-11/30/1994 FY94: \$1 TOTAL: \$68,637
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N SHAH LARC/J J LAMBIOTTE 29-Math/Computer, NEC

NAG 3-1371 **Norfolk State University** **8127**
 AN NMR STUDY OF MICROVOIDS WATER-SOAKED EPOXY POLY
 MERS
Period *Obligations*
 10/01/1992-12/20/1994 FY94: \$89,321 TOTAL: \$178,721
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L MATTIX LERC/M A MEADOR 47-Materials Engr

NAG 8-257 **Norfolk State University** **8128**
 JOVE
Period *Obligations*
 01/15/1993-05/31/1995 FY94: \$18,328 TOTAL: \$62,288
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L MATTIX MSFC/F SIX 99-Multi-Discip

NCC 1-200 **Norfolk State University** **8129**
 COOPERATIVE PROGRAM FOR RESEARCH AND CURRICULUM
 DEVELOPMENT IN EARTH SYSTEM SCIENCE -- MY 1/3
Period *Obligations*
 09/27/1994-09/30/1995 FY94: \$130,000 TOTAL: \$130,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F MILLER LARC/R HATHAWAY 39-Env Sci, NEC
 T LARC/E PRIOR
 MARSHALL-BRADLEY

NGT 00-090-160 **Norfolk State University** **8130**
 EXPANDING CHROME CLUBS
Period *Obligations*
 05/05/1993-02/28/1995 FY94: \$71,579 TOTAL: \$143,158
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J S SHAY HQ/S STOVALL-ALEXANDER 49-Engr, NEC

NAG 1-363 **Old Dominion University** **8131**
 INSTITUTE FOR COMPUTATIONAL AND APPLIED MECHANICS
 (ICAM)
Period *Obligations*
 05/06/1983-12/31/1994 FY94: \$250,881 TOTAL: \$1,511,912
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N TIWARI LARC/S E MASSENBERG 41-Aero Engr
 LARC/E J PRIOR

NAG 1-423 **Old Dominion University** **8132**
 ANALYSIS AND COMPUTATION OF INTERNAL FLOW FIELD IN A
 SCRAMJET ENGINE
Period *Obligations*
 10/19/1983-07/31/1994 FY94: \$0 TOTAL: \$379,103
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N TIWARI LARC/A KUMAR 41-Aero Engr
 LARC/D L DWOYER

NAG 1-439 **Old Dominion University** **8133**
 POTENTIAL USE OF AUTOMATIC PROGRAMMING TECHNOLOGY IN
 THE PRODUCTION OF ULTRA-RELIABLE COMPUTING SYST
Period *Obligations*
 01/10/1984-12/31/1994 FY94: \$59,240 TOTAL: \$778,274
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C D WILD LARC/D E ECKHARDT 22-Computer Science
 S ZEIL

NAG 1-648 **Old Dominion University** **8134**
 UNSTEADY HYBRID VORTEX TECHNIQUE FOR TRANSONIC VOR
 TEX FLOWS AND FLUTTER APPLICATIONS
Period *Obligations*
 02/20/1986-11/30/1994 FY94: \$79,120 TOTAL: \$502,652
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 O A KANDIL LARC/J B MALONE 41-Aero Engr
 LARC/W WHITLOW

NAG 1-750 **Old Dominion University** **8135**
 SOFTWARE RELIABILITY MODELS BASED ON PROGRAM SPACE
 EQUIVALENCE CLASSES
Period *Obligations*
 03/30/1987-10/01/1994 FY94: \$0 TOTAL: \$121,986
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L WILSON LARC/K J HAYHURST 29-Math/Computer, NEC
 LARC/G B FINELLI

NAG 1-858 **Old Dominion University** **8136**
 PARALLEL PROCEDURES FOR STATICS, EIGENVALUE ANALYS IS
 AND STRUCTURAL DYNAMICS
Period *Obligations*
 02/24/1988-12/31/1994 FY94: \$80,000 TOTAL: \$357,473
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D T NGUYEN LARC/O O STORAASLI 44-Civil Engr
 LARC/S BOSTIC

NAG 1-902 **Old Dominion University** **8137**
 EVALUATION AND DEVELOPMENT OF TECHNOLOGIES FOR CRE
 ATION OF RELIABLE SOFTWARE
Period *Obligations*
 07/22/1988-12/15/1993 FY94: TOTAL: \$25,432
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C M OVERSTREET LARC/G B FINELLI 29-Math/Computer, NEC

NAG 1-908 **Old Dominion University** **8138**
 EXTREMELY HIGH DATA-RATE, RELIABLE NETWORK SYSTEMS
 RESEARCH
Period *Obligations*
 09/02/1988-08/15/1994 FY94: \$10,153 TOTAL: \$101,294
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K MALY LARC/N D MURRAY 22-Computer Science

NAG 1-994 **Old Dominion University** **8139**
 ANALYSIS AND CONTROL OF SUPERSONIC VORTEX BREAK- DOWN
 FLOWS
Period *Obligations*
 03/17/1989-11/30/1994 FY94: \$123,972 TOTAL: \$656,306
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 O A KANDIL LARC/G C GREENE 13-Physics

NAG 1-1056 **Old Dominion University** **8140**
 LARGE ANGLE MAGNETIC SUSPENSION TEST FIXTURE
Period *Obligations*
 08/29/1989-10/31/1994 FY94: \$69,417 TOTAL: \$247,772
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 C P BRITCHER LARC/N J GROOM 49-Engr, NEC

NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)

NAG 1-1067 **Old Dominion University** **8141**
POLYMER INFILTRATION STUDIES
Period *Obligations*
10/25/1989-10/31/1994 FY94: \$176,353 TOTAL: \$742,749
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J M MARCHELLO LARC/R M BAUCOM 43-Chem Engr
S N TIWARI LARC/J B NELSON

NAG 1-1114 **Old Dominion University** **8142**
BUILDING A GENERALIZED DISTRIBUTED SYSTEM MODEL
Period *Obligations*
03/15/1990-12/31/1994 FY94: \$10,153 TOTAL: \$53,881
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R MUKKAMALA LARC/W H BRYANT 22-Computer Science
E FOUDEAT

NAG 1-1140 **Old Dominion University** **8143**
AN INVESTIGATION OF GLOW DISCHARGE MEMBRANE SEPERATION OF OXYGEN FROM MARS ATMOSPHERE
Period *Obligations*
05/07/1990-12/31/1994 FY94: \$0 TOTAL: \$129,383
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R L ASH LERC/R A OUTLAW 47-Materials Engr
LERC/J H LEE

NAG 1-1150 **Old Dominion University** **8144**
A CFD STUDY OF COMPLEX MISSILE AND STORE CONFIGURATIONS IN RELATIVE MOTION.
Period *Obligations*
05/31/1990-09/30/1994 FY94: \$1 TOTAL: \$342,497
Prin. Invest. *NASA Tech. Officer* *CASE Category*
O BAYSAL LARC/D S MILLER 19-Phys Sci, NEC
LARC/R P BOYDEN

NAG 1-1188 **Old Dominion University** **8145**
AERODYNAMIC OPTIMIZATION AND SENSITIVITY ANALYSIS USING COMPUTATIONAL FLUID DYNAMICS
Period *Obligations*
10/05/1990-05/31/1994 FY94: \$0 TOTAL: \$290,978
Prin. Invest. *NASA Tech. Officer* *CASE Category*
O BAYSAL LARC/D S MILLER 41-Aero Engr
LARC/P F COVELL

NAG 1-1223 **Old Dominion University** **8146**
NEW METHOD FOR RECOGNIZING QUADRIC SURFACES FROM RANGE DATA AND APPLICATION TO TELEROBOTICS AND AUTOMA
Period *Obligations*
02/20/1991-02/28/1994 FY94: \$0 TOTAL: \$218,319
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R MIELKE LARC/P W GOODE 29-Math/Computer, NEC

NAG 1-1265 **Old Dominion University** **8147**
METHODOLOGY FOR SENSITIVITY ANALYSIS, APPROXIMATE ANALYSIS AND DESIGN OPTIMIZATION IN CFD FOR MULTI
Period *Obligations*
04/11/1991-04/14/1995 FY94: \$60,000 TOTAL: \$306,360
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A C TAYLOR LARC/H E JONES 41-Aero Engr
G W HOU LARC/E C YATES

NAG 1-1302 **Old Dominion University** **8148**
VIRGINIA NETWORK FOR TECHNOLOGY
Period *Obligations*
07/10/1991-06/30/1995 FY94: \$37,933 TOTAL: \$118,797
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E M RUDISILL LARC/S E MASSENBERG 21-Mathematics

NAG 1-1358 **Old Dominion University** **8149**
NONLINEAR ANALYSES OF COMPOSITE AEROSPACE STRUCTURES IN SONIC FATIGUE
Period *Obligations*
11/19/1991-12/15/1994 FY94: \$81,190 TOTAL: \$336,135
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MEI LARC/S A RIZZI 41-Aero Engr
U SHIRAHATTI LARC/C A POWELL

NAG 1-1424 **Old Dominion University** **8150**
THEORETICAL STUDIES OF THERMAL AND ELECTRIC PROPULSION
Period *Obligations*
04/13/1992-05/15/1995 FY94: \$52,015 TOTAL: \$217,295
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J H HEINBOCKEL LARC/S H CHOI 13-Physics
LARC/E J CONWAY

NAG 1-1426 **Old Dominion University** **8151**
DEVELOPMENT OF A CASE TOOL TO SUPPORT DECISION BASED SOFTWARE DEVELOPMENT
Period *Obligations*
04/13/1992-09/30/1994 FY94: \$10,230 TOTAL: \$22,015
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C WILD LARC/D E ECKHARDT 22-Computer Science

NAG 1-1431 **Old Dominion University** **8152**
THERMAL STRUCTURAL ANALYSIS FOR CSM TESTBED NLPN 92-231
Period *Obligations*
04/17/1992-08/15/1994 FY94: \$44,353 TOTAL: \$108,353
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C MEI LARC/J M HOUSNER 46-Mech Engr

NAG 1-1437 **Old Dominion University** **8153**
IMPROVED TECHNIQUES FOR VORTEX HAZARD PREDICTION NEAR AIRPORTS
Period *Obligations*
04/28/1992-10/31/1994 FY94: \$102,415 TOTAL: \$183,415
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R L ASH LARC/G C GREENE 13-Physics
LARC/D D VICROY

NAG 1-1499 **Old Dominion University** **8154**
DOMAIN DECOMPOSITION FOR ANALYSIS AND OPTIMIZATION NLPN 93-220
Period *Obligations*
03/30/1993-05/31/1995 FY94: \$22,000 TOTAL: \$67,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
O BAYAAL LARC/D S MILLER 41-Aero Engr
LARC/P F COVELL

NAG 1-1505 **Old Dominion University** **8155**
ASSUMED-STRESS HYBRID ELEMENTS WITH DRILLING DEGREES OF FREEDOM FOR NONLINEAR ANALYSIS
Period *Obligations*
04/21/1993-05/15/1995 FY94: \$139,940 TOTAL: \$179,863
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N KNIGHT LARC/A TESSLER 46-Mech Engr

NAG 1-1518 **Old Dominion University** **8156**
INSTABILITY WAVE MODELS AND SUPERSONIC JET NOISE NLPN 93-232
Period *Obligations*
05/28/1993-05/27/1995 FY94: \$40,000 TOTAL: \$116,465
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S H TIWARI LARC/J M SEINER 41-Aero Engr
T R BHAT LARC/M K PONTON

NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)

NAG 1-1550 **Old Dominion University** **8157**
 A PARALLEL AND DISTRIBUTED COMPUTING ENVIRONMENT FOR
 SCIENTIFIC APPLICATIONS
Period *Obligations*
 11/17/1993-11/16/1995 FY94: \$69,568 TOTAL: \$69,568
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K MALY LARC/M D SALAS 22-Computer Science
 M ZUBAIR
 C M OVERSTREET

NAG 1-1551 **Old Dominion University** **8158**
 BASELINE BIOLOGICAL SURVEY OF TERRESTRIAL AND AQUATIC
 HABITATS ENDANGERED AND THREATENED FAUNA
Period *Obligations*
 12/21/1993-12/31/1994 FY94: \$37,089 TOTAL: \$37,089
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R L BEDENBAUGH LARC/J A BENSON 54-Env Biology

NAG 1-1552 **Old Dominion University** **8159**
 HOT-WIRE ANEMOMETER MEASUREMENTS IN TRANSONIC AND
 SLIP-FLOW ENVIRONMENTS NLPN 93-826
Period *Obligations*
 11/18/1993-11/17/1994 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R L ASH LARC/G S JONES 41-Aero Engr

NAG 1-1556 **Old Dominion University** **8160**
 LAMINAR INSTABILITY MEASUREMENT SYSTEM FOR SLFC FLIGHT
 RESEARCH PROGRAM
Period *Obligations*
 11/24/1993-11/30/1994 FY94: \$109,574 TOTAL: \$109,574
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 S N TIWARI LARC/M C FISCHER 41-Aero Engr
 S J MILEY

NAG 1-1567 **Old Dominion University** **8161**
 NONLINEAR TRANSIENT THERMAL ANALYSIS BY THE FORCE OF
 DERIVATIVE METHOD
Period *Obligations*
 01/05/1994-01/03/1995 FY94: \$19,500 TOTAL: \$19,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G HOU LARC/C J CANARDA 41-Aero Engr
 V BALEKRISHNEN LARC/J H STARNES

NAG 1-1576 **Old Dominion University** **8162**
 AERODYNAMIC SHAPE OPTIMIZATION DIRECTED TOWARD A
 SUPERSONIC TRANSPORT USING SENSITIVITY ANALYSIS
Period *Obligations*
 03/10/1994-03/15/1995 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 O BAYSAL LARC/J L DILLON 41-Aero Engr
 LARC/P F COVELL

NAG 1-1578 **Old Dominion University** **8163**
 DEVELOPMENT OF A Ti:AL2O3 LASER FOR REMOTE SENSING OF
 THE ATMOSPHERE NLPN 93-1104
Period *Obligations*
 12/16/1993-12/31/1994 FY94: \$23,778 TOTAL: \$23,778
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 H ELSAYED-ALI LARC/E V BROWELL 13-Physics
 W SITU LARC/A F CARTER

NAG 1-1588 **Old Dominion University** **8164**
 ANALYSIS AND DESIGN OF FUSELAGE STRUCTURES INCLUDING
 RESIDUAL STRENGTH PREDICTION METHODOLOGY
Period *Obligations*
 02/09/1994-02/07/1995 FY94: \$90,370 TOTAL: \$90,370
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N F KNIGHT LARC/J H STARNES 41-Aero Engr
 M S ANDERSON LARC/D R AMBUR

NAG 1-1603 **Old Dominion University** **8165**
 SUPERSONIC SUCTION LAMINAR FLOW CONTROL EXPERIMENT
 WITH APPLICATION TO THE HIGH SPEED CIVIL TRANSPORT
Period *Obligations*
 12/28/1993-11/30/1994 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 T AMER LARC/M J WALSH 46-Mech Engr

NAG 3-1329 **Old Dominion University** **8166**
 CONVERGENCE ACCELERATION OF THE PROTEUS COMPUTER C
 ODE WITH MULTIGRID METHODS
Period *Obligations*
 02/19/1992-11/04/1994 FY94: \$48,490 TOTAL: \$187,652
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 A O DEMUREN LARC/J R SCOTT 29-Math/Computer.NEC

NAG 5-1401 **Old Dominion University** **8167**
 OCEAN COLOR MEASUREMENTS IN COUPLED MODELS
Period *Obligations*
 07/05/1990-12/31/1993 FY94: \$0 TOTAL: \$167,187
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E E HOFMANN GSFC/C R MCCLAIN 33-Oceanography

NAG 5-1527 **Old Dominion University** **8168**
 STUDIES OF PARTICLE RADIATION DAMAGE EFFECTS IN
 SPACECRAFT INSTRUMENTATION
Period *Obligations*
 04/08/1991-04/14/1995 FY94: \$47,000 TOTAL: \$197,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J BECHER GSFC/R A KIMBLE 13-Physics
 GSFC/F J REBAR

NAGW 3550 **Old Dominion University** **8169**
 ASSIMILATION OF OCEAN COLOR MEASUREMENT INTO PHYSICAL
 BIOLOGICAL MODELS
Period *Obligations*
 04/29/1993-02/28/1995 FY94: \$130,000 TOTAL: \$205,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E HOFMANN HQ/R E MURPHY 33-Oceanography
 HQ/D M BUTLER

NAGW 3981 **Old Dominion University** **8170**
 AVHRR PATHFINDER OCEAN DATA VALIDATION
Period *Obligations*
 05/14/1994-01/31/1995 FY94: \$194,080 TOTAL: \$194,080
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E SMITH HQ/M E MAIDEN 33-Oceanography

NAG10-110 **Old Dominion University** **8171**
 ROOT GROWTH AND DEVELOPMENT IN RESPONSE CO2 STUDY
Period *Obligations*
 07/02/1992-10/15/1994 FY94: \$10,106 TOTAL: \$25,758
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 F P DAY KSC/W M KNOTT 51-Biological Sci

NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)

NAS 1-18584	Old Dominion University	8172	NCC 1-176	Old Dominion University	8179
AERODYNAMICS, FLUID MECHANICS, INSTRUMENTATION, AVIONICS, COMPUTING AND OTHER RELATED FIELDS			FUNCTIONAL RELATIONSHIPS AMONG MONITORING PERFORMANCE: SUBJECTIVE REPORT OF THOUGHT PROCESS		
<i>Period</i> 11/02/1987-11/01/1992 <i>Obligations</i> FY94: \$0 TOTAL: \$7,456,475			<i>Period</i> 03/30/1993-05/15/1995 <i>Obligations</i> FY94: \$21,000 TOTAL: \$33,095		
<i>Prin. Invest.</i> B E WOLFSON <i>NASA Tech. Officer</i> NASA Tech. Officer <i>CASE Category</i> CASE Category			<i>Prin. Invest.</i> F G FREEMAN <i>NASA Tech. Officer</i> NASA Tech. Officer <i>CASE Category</i> CASE Category		
LARC/E D PRIOR 41-Aero Engr			LARC/A T POPE 69-Psych, NEC		
LARC/S E MASSENBERG			LARC/J R COMSTOCK		
NAS 1-19858	Old Dominion University	8173	NCC 1-180	Old Dominion University	8180
RESEARCH IN AERODYNAMICS AND RELATED FIELDS			COMPUTATIONAL AND EXPERIMENTAL PARAMETRIC STUDY OF TRANSITION AT HIGH MACH NUMBERS		
<i>Period</i> 11/05/1992-11/04/1997 <i>Obligations</i> FY94: \$1,852,026 TOTAL: \$3,214,388			<i>Period</i> 05/13/1993-05/15/1995 <i>Obligations</i> FY94: \$11,925 TOTAL: \$47,680		
<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category			<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category		
LARC/E J PRIOR 41-Aero Engr			LARC/S P WILKINSON 41-Aero Engr		
LARC/R L YANG			A E BLANCHARD		
NCC 1-42	Old Dominion University	8174	NGT 00-040-009	Old Dominion University	8181
A STUDY OF PHYSICAL PROCESSES FOR SPACE - RELATED PROTECTION			NATIONAL SPACE GRANT COLLEGE		
<i>Period</i> 06/04/1980-12/31/1994 <i>Obligations</i> FY94: \$92,000 TOTAL: \$1,342,388			<i>Period</i> 10/12/1989-01/31/1995 <i>Obligations</i> FY94: \$468,584 TOTAL: \$2,236,694		
<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category			<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category		
G S KHANDELWAL 13-Physics			HQ/E T SCHWARTZ 99-Multi-Discip		
LARC/E J CONWAY			M L SANDY		
NCC 1-68	Old Dominion University	8175	NGT 00-050-544	Old Dominion University	8182
NUMERICAL SOLUTION OF AXISYMMETRIC FLOW WITH ARBITRARY WALL GEOMETRY			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i> 05/28/1982-12/31/1994 <i>Obligations</i> FY94: \$60,790 TOTAL: \$480,349			<i>Period</i> 05/10/1990-04/30/1993 <i>Obligations</i> FY94: \$0 TOTAL: \$66,000		
<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category			<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category		
S N TIWARI 41-Aero Engr			HQ/F C OWENS 46-Mech Engr		
J S ABOLHASSANI			G V SELBY		
M KATHONG					
NCC 1-99	Old Dominion University	8176	NGT 00-050-716	Old Dominion University	8183
GEOMETRIC MODELING FOR COMPUTER AIDED DESIGN			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i> 06/14/1985-12/31/1994 <i>Obligations</i> FY94: \$140,701 TOTAL: \$1,294,706			<i>Period</i> 06/25/1991-05/31/1994 <i>Obligations</i> FY94: \$8,750 TOTAL: \$66,000		
<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category			<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category		
J L SCHWING 22-Computer Science			HQ/F C OWENS 46-Mech Engr		
LARC/L F ROWELL			G V SELBY		
LARC/M L MCMILLIN					
NCC 1-136	Old Dominion University	8177	NGT 00-050-980	Old Dominion University	8184
ATAMM ENHANCEMENT AND MULTIPROCESSOR PERFORMANCE EVALUATION			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i> 03/15/1989-03/31/1994 <i>Obligations</i> FY94: \$0 TOTAL: \$1,207,167			<i>Period</i> 07/24/1992-06/30/1995 <i>Obligations</i> FY94: \$22,000 TOTAL: \$66,000		
<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category			<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category		
W STOUGHTON 45-Elec Engr			LARC/E PRIOR 46-Mech Engr		
R R MIELKE			A O DEMUREH		
LARC/P J HAYES					
LARC					
NCC 1-164	Old Dominion University	8178	NGT 00-050-986	Old Dominion University	8185
A PORTABLE FETAL HEART MONITOR AND ITS ADAPTATION TO THE DETECTION OF CERTAIN PRENATAL ABNORMALITIES			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i> 05/01/1992-10/31/1993 <i>Obligations</i> FY94: \$0 TOTAL: \$54,082			<i>Period</i> 08/20/1992-06/30/1995 <i>Obligations</i> FY94: \$22,000 TOTAL: \$66,000		
<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category			<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category		
D L LIVINGSTON 45-Elec Engr			LARC/E PRIOR 69-Psych, NEC		
LARC/D L GRAY			G COATES		
NCC 1-164	Old Dominion University	8178	NGT 00-050-987	Old Dominion University	8186
A PORTABLE FETAL HEART MONITOR AND ITS ADAPTATION TO THE DETECTION OF CERTAIN PRENATAL ABNORMALITIES			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i> 05/01/1992-10/31/1993 <i>Obligations</i> FY94: \$0 TOTAL: \$54,082			<i>Period</i> 08/19/1992-08/14/1995 <i>Obligations</i> FY94: \$18,351 TOTAL: \$62,351		
<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category			<i>Prin. Invest.</i> NASA Tech. Officer <i>CASE Category</i> CASE Category		
D L LIVINGSTON 45-Elec Engr			R PROBHAKARAN 46-Mech Engr		
LARC/D L GRAY			LARC/E J PRIOR		

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NGT 00-051-103	Old Dominion University	8187
GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
05/27/1993-06/30/1994	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A DHARAMSI	HQ/J T LYNCH	45-Elec Engr
NGT 00-051-104	Old Dominion University	8188
GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
06/22/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G S KHANDELWAL	LARC/E J PRIOR	13-Physics
NGT 00-051-164	Old Dominion University	8189
GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
07/23/1993-12/31/1994	FY94: \$7,334	TOTAL: \$29,334
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S TIWARI	HQ/J T LYNCH	46-Mech Engr
NGT 00-051-188	Old Dominion University	8190
GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
09/01/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K H SCHOENBACH	LARC/L EVANS	45-Elec Engr
NGT 00-051-247	Old Dominion University	8191
GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
06/14/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A C TAYLOR	LARC/L EVANS	46-Mech Engr
NGT 00-051-253	Old Dominion University	8192
GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
06/14/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J B COOPER	LARC/L EVANS	12-Chemistry
NGT 00-051-259	Old Dominion University	8193
GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
06/09/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R L ASH	LARC/L EVANS	41-Aero Engr
NGT 00-070-231	Old Dominion University	8194
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
12/19/1991-12/31/1993	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S ALBIN	LARC/E J PRIOR	45-Elec Engr
NGT 00-070-263	Old Dominion University	8195
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
07/15/1992-04/30/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W L HARNES	LARC/E J PRIOR	13-Physics
NGT 00-070-296	Old Dominion University	8196
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
08/14/1992-06/30/1993	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J W STAUGHTON	LARC/E PRIOR	45-Elec Engr
NGT 00-070-300	Old Dominion University	8197
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
10/21/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J HUANG	LARC/E J PRIOR	46-Mech Engr
NGT 00-070-307	Old Dominion University	8198
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
05/23/1993-05/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S ALBIN	HQ/J T LYNCH	45-Elec Engr
NGT 00-070-308	Old Dominion University	8199
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
05/20/1993-08/31/1996	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S ALBIN	HQ/D K RUSSELL	45-Elec Engr
NGT 00-070-382	Old Dominion University	8200
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
<i>Period</i>	<i>Obligations</i>	
08/30/1994-06/30/1997	FY94: \$44,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J L SCHWING	HQ/D K RUSSELL	22-Computer Science
NGT 00-090-143	Old Dominion University	8201
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)		
<i>Period</i>	<i>Obligations</i>	
09/26/1992-08/14/1994	FY94: \$0	TOTAL: \$24,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E J CROSS	HQ/D K RUSSELL	99-Multi-Discip
NGT 00-090-144	Old Dominion University	8202
GSRP/UMF		
<i>Period</i>	<i>Obligations</i>	
09/24/1992-08/14/1993	FY94: \$0	TOTAL: \$12,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E J CROSS	HQ/D K RUSSELL	99-Multi-Discip
NGT47-3029	Old Dominion University	8203
TO SUPPORT THE SUMMER FACULTY FELLOWSHIP PROGRAM IN RESEARCH \$150,870		
<i>Period</i>	<i>Obligations</i>	
11/14/1969-12/31/1994	FY94: \$8,000	TOTAL: \$4,085,389
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S N TIWARI	HQ/A S MCGEE	49-Engr, NEC
	HQ/E T SCHWARTZ	

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

<p>NAG 8-1009 Radford University 8204</p> <p>JOVE</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>11/24/1993-05/31/1994</td> <td>FY94: \$30,000</td> <td>TOTAL: \$30,000</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>J D ECKERT</td> <td>MSFC/F SIX</td> <td>11-Astronomy</td> <td></td> </tr> <tr> <td>B H KUENNECKE</td> <td></td> <td></td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		11/24/1993-05/31/1994	FY94: \$30,000	TOTAL: \$30,000		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		J D ECKERT	MSFC/F SIX	11-Astronomy		B H KUENNECKE				<p>NAG 1-1013 University of Virginia 8212</p> <p>ANALYSIS OF HIGH SPEED FLOW, THERMAL AND STRUCTURAL INTERACTIONS</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>06/05/1989-12/31/1993</td> <td>FY94: \$0</td> <td>TOTAL: \$995,212</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>E A THORNTON</td> <td>LARC/A R WIETING</td> <td>49-Engr. NEC</td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		06/05/1989-12/31/1993	FY94: \$0	TOTAL: \$995,212		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		E A THORNTON	LARC/A R WIETING	49-Engr. NEC					
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E A THORNTON	LARC/A R WIETING	49-Engr. NEC																																							
<p>NGT 00-023-000 Thomas Nelson Community College 8205</p> <p>NGT-23000/THOMAS NELSON COMMUNITY COLL/STUDENT PROGRAMS UNDER THOMAS NELSON COMMUNITY COLL</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>11/05/1992-11/30/1994</td> <td>FY94: \$0</td> <td>TOTAL: \$431,917</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>S FINCKE</td> <td>LARC/R YANG</td> <td>99-Multi-Discip</td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		11/05/1992-11/30/1994	FY94: \$0	TOTAL: \$431,917		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		S FINCKE	LARC/R YANG	99-Multi-Discip		<p>NAG 1-1112 University of Virginia 8213</p> <p>ALGORITHMS FOR PARALLEL AND VECTOR COMPUTATION</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>03/07/1990-02/28/1995</td> <td>FY94: \$30,000</td> <td>TOTAL: \$144,987</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>J M ORTEGA</td> <td>LARC/A L OVERMAN</td> <td>29-Math/Cmputer, NEC</td> <td></td> </tr> <tr> <td></td> <td>LARC/J J LAMBIOTTE</td> <td></td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		03/07/1990-02/28/1995	FY94: \$30,000	TOTAL: \$144,987		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		J M ORTEGA	LARC/A L OVERMAN	29-Math/Cmputer, NEC			LARC/J J LAMBIOTTE						
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J M ORTEGA	LARC/A L OVERMAN	29-Math/Cmputer, NEC																																							
	LARC/J J LAMBIOTTE																																								
<p>NAG 1-774 University of Richmond 8206</p> <p>DESIGN AND IMPLEMENTATION OF A PREPROCESSOR FOR ADA LANGUAGE TO SUPPORT USE OF MULTIWAY ACCEPT</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>05/14/1987-12/31/1993</td> <td>FY94: \$0</td> <td>TOTAL: \$240,093</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>A CHARLESWORTH</td> <td>LARC/C M HOLLOWAY</td> <td>22-Computer Science</td> <td></td> </tr> <tr> <td></td> <td>LARC/C K WALKER</td> <td></td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		05/14/1987-12/31/1993	FY94: \$0	TOTAL: \$240,093		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		A CHARLESWORTH	LARC/C M HOLLOWAY	22-Computer Science			LARC/C K WALKER			<p>NAG 1-1123 University of Virginia 8214</p> <p>SOFTWARE FAULT TOLERANCE USING DATA DIVERSITY</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>04/02/1990-07/31/1995</td> <td>FY94: \$70,280</td> <td>TOTAL: \$397,355</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>J C KNIGHT</td> <td>LARC/D E ECKHARDT</td> <td>22-Computer Science</td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		04/02/1990-07/31/1995	FY94: \$70,280	TOTAL: \$397,355		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		J C KNIGHT	LARC/D E ECKHARDT	22-Computer Science					
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<p>NAG 1-242 University of Virginia 8207</p> <p>RESEARCH IN COMPUTER SCIENCE</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>11/10/1981-01/31/1994</td> <td>FY94: \$0</td> <td>TOTAL: \$867,250</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>J M ORTEGA</td> <td>LARC/W H BRYANT</td> <td>22-Computer Science</td> <td></td> </tr> <tr> <td></td> <td>LARC/K A SMITH</td> <td></td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		11/10/1981-01/31/1994	FY94: \$0	TOTAL: \$867,250		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		J M ORTEGA	LARC/W H BRYANT	22-Computer Science			LARC/K A SMITH			<p>NAG 1-1162 University of Virginia 8215</p> <p>TRANSVERSRE STRESSES IN LAMINATED COMPOSITE PANELS (FDP)</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>07/11/1990-08/31/1995</td> <td>FY94: \$80,000</td> <td>TOTAL: \$359,201</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>A K NOOR</td> <td>LARC/J H STARNES</td> <td>41-Aero Engr</td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		07/11/1990-08/31/1995	FY94: \$80,000	TOTAL: \$359,201		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		A K NOOR	LARC/J H STARNES	41-Aero Engr					
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<p>NAG 1-350 University of Virginia 8208</p> <p>STRESS EFFECTS IN MULTILAYERS</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>04/07/1983-12/31/1994</td> <td>FY94: \$206,494</td> <td>TOTAL: \$1,519,090</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>W A JESSER</td> <td>ARC/A L FRIPP</td> <td>19-Phys Sci, NEC</td> <td></td> </tr> <tr> <td>M E ORAZEM</td> <td>LARC/I O CLARK</td> <td></td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		04/07/1983-12/31/1994	FY94: \$206,494	TOTAL: \$1,519,090		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		W A JESSER	ARC/A L FRIPP	19-Phys Sci, NEC		M E ORAZEM	LARC/I O CLARK			<p>NAG 1-1180 University of Virginia 8216</p> <p>NONLINEAR ANALYSIS AND MODELING OF TIRES</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>09/17/1990-12/31/1994</td> <td>FY94: \$65,000</td> <td>TOTAL: \$230,000</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>A K NOOR</td> <td>LARC/J A TANNER</td> <td>46-Mech Engr</td> <td></td> </tr> <tr> <td></td> <td>LARC/M P ROBINSON</td> <td></td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		09/17/1990-12/31/1994	FY94: \$65,000	TOTAL: \$230,000		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		A K NOOR	LARC/J A TANNER	46-Mech Engr			LARC/M P ROBINSON		
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<p>NAG 1-795 University of Virginia 8210</p> <p>SUPERSONIC COMBUSTION OF HYDROGEN IN AIR</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>07/14/1987-08/31/1994</td> <td>FY94: \$177,999</td> <td>TOTAL: \$3,134,512</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>J C MCDANIEL</td> <td>LARC/G B NORTAN</td> <td>41-Aero Engr</td> <td></td> </tr> <tr> <td></td> <td>LARC/ANTCLIFF</td> <td></td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		07/14/1987-08/31/1994	FY94: \$177,999	TOTAL: \$3,134,512		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		J C MCDANIEL	LARC/G B NORTAN	41-Aero Engr			LARC/ANTCLIFF			<p>NAG 1-1434 University of Virginia 8218</p> <p>DESIGN OF HIGH PERFORMANCE OPTICAL DETECTOR SYSTEM FOR THE NASA SUNLITE PROJECT - FDP</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>04/29/1992-05/31/1993</td> <td>FY94:</td> <td>TOTAL: \$9,903</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>E D TOWE</td> <td>LARC/P I CARRAWAY</td> <td>45-Elec Engr</td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		04/29/1992-05/31/1993	FY94:	TOTAL: \$9,903		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		E D TOWE	LARC/P I CARRAWAY	45-Elec Engr					
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<p>NAG 1-841 University of Virginia 8211</p> <p>OUT OF PLANE GRADIENTS IN LAMINATED COMPOSITE STRUCTURES</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>12/23/1987-12/31/1993</td> <td>FY94:</td> <td>TOTAL: \$196,797</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>C T HERAKOVICH</td> <td>LARC/J H STARNES JR.</td> <td>41-Aero Engr</td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		12/23/1987-12/31/1993	FY94:	TOTAL: \$196,797		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		C T HERAKOVICH	LARC/J H STARNES JR.	41-Aero Engr		<p>NAG 1-1529 University of Virginia 8219</p> <p>RESEARCH IN PARALLEL COMPUTING</p> <table border="0"> <tr> <td><i>Period</i></td> <td></td> <td><i>Obligations</i></td> <td></td> </tr> <tr> <td>07/12/1993-07/08/1995</td> <td>FY94: \$35,000</td> <td>TOTAL: \$70,000</td> <td></td> </tr> <tr> <td><i>Prin. Invest.</i></td> <td><i>NASA Tech. Officer</i></td> <td><i>CASE Category</i></td> <td></td> </tr> <tr> <td>J M ORTEGA</td> <td>LARC/J J LAMBIOTTE</td> <td>22-Computer Science</td> <td></td> </tr> </table>	<i>Period</i>		<i>Obligations</i>		07/12/1993-07/08/1995	FY94: \$35,000	TOTAL: \$70,000		<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		J M ORTEGA	LARC/J J LAMBIOTTE	22-Computer Science									
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**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NAG 1-1633 **University of Virginia** **8220**
FUEL PLUME IMAGING VALIDATION
Period *Obligations*
07/06/1994-09/30/1995 FY94: \$70,000 TOTAL: \$70,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C MCDANIEL LARC/R C ROGERS 41-Aero Engr
LARC/C R MCCLINTON

NAG 3-1396 **University of Virginia** **8227**
THE EFFECTS OF CONVECTION ON THE THERMOCAPILLARY MOTION OF DEFORMABLE DROPS IN CYLINDRICAL CONTAINER
Period *Obligations*
12/04/1992-11/30/1994 FY94: \$82,127 TOTAL: \$166,628
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H HAJ-HARIRI LERC/J A SALZMAN 46-Mech Engr

NAG 2-845 **University of Virginia** **8221**
MEASURING FRAME RATE AND TRACKING REQUIREMENTS IN VIRTUAL ENVIRONMENTS
Period *Obligations*
06/10/1993-06/30/1994 FY94: \$0 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R PAUSCH ARC/T A LASINSKI 22-Computer Science
ARC/A VAZIRI

NAG 3-1518 **University of Virginia** **8228**
FREE STREAM VITIATION EFFECTS ON SUPERSONIC COMBUSTION OF HYDROGEN IN AIR
Period *Obligations*
09/10/1993-12/18/1994 FY94: \$50,000 TOTAL: \$278,938
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H KRAUSS LERC/S R THOMAS 41-Aero Engr
J C MCDANIEL LERC/C J TREFNY
H K CHELLIAH

NAG 2-872 **University of Virginia** **8222**
1993 INTERNATIONAL SEMICONDUCTOR DEVICE RESEARCH SYMPOSIUM (ISDRS-93)
Period *Obligations*
08/19/1993-02/28/1994 FY94: \$0 TOTAL: \$5,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M SHUR ARC/J LARIMER 45-Elec Engr

NAG 5-700 **University of Virginia** **8229**
ULTRAVIOLET IMAGING TELESCOPE ASTRONOMICAL OBSERVATIONS
Period *Obligations*
09/01/1985-07/14/1996 FY94: \$185,194 TOTAL: \$898,552
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W O CONNELL GSFC/T P STECHER 11-Astronomy
GSFC/G R BAKER

NAG 3-1319 **University of Virginia** **8223**
MICROMECHANICAL MODELLING OF GRAPHITE/COPPER COMPOSITE SITES UNDER THERMOMECHANICAL LOADING
Period *Obligations*
01/29/1992-10/31/1994 FY94: \$9,737 TOTAL: \$119,158
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M J PINDER LERC/R V MINER 47-Materials Engr

NAG 5-865 **University of Virginia** **8230**
MICROGRAVITY NUCLEATION AND PARTICLE COAGULATION EXPERIMENT SUPPORT
Period *Obligations*
01/01/1987-06/30/1994 FY94: \$0 TOTAL: \$310,884
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L U LILLELEHT GSFC/J A NUTH 19-Phys Sci, NEC
GSFC/J E ALLEN

NAG 3-1334 **University of Virginia** **8224**
HIGH PERFORMANCE MAGNETIC BEARINGS FOR AERONAUTICAL APPLICATIONS
Period *Obligations*
03/03/1992-11/22/1994 FY94: \$20,000 TOTAL: \$287,324
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P E ALLAIRE LERC/G V BROWN 46-Mech Engr
C R KNOSPE
E H MASLEN

NAG 5-1018 **University of Virginia** **8231**
FOREST ECOSYSTEMS DYNAMICS
Period *Obligations*
10/15/1987-03/14/1995 FY94: \$109,797 TOTAL: \$566,876
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H H SHUGART GSFC/D L WILLIAMS 39-Env Sci, NEC

NAG 5-1877 **University of Virginia** **8232**
AGE CALIBRATION OF MG II CHROMOSPHERIC EMISSION
Period *Obligations*
01/23/1992-01/31/1994 FY94: \$0 TOTAL: \$6,992
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W O'CONNELL GSFC/D WEST 11-Astronomy

NAG 3-1356 **University of Virginia** **8225**
RISK RANKING METHODOLOGY FOR DESIGN EVALUATION OF THE SPACE STATION
Period *Obligations*
06/10/1992-01/27/1994 FY94: \$0 TOTAL: \$95,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Y Y HAIMES LERC/J R REAGAN 49-Engr, NEC
D LI LERC/W F FORD
J PET-EDWARDS

NAG 5-1891 **University of Virginia** **8233**
COOLING FLOW CLUSTERS WITH EVIDENCE FOR STAR FORMATION AND/OR COOL GAS
Period *Obligations*
02/10/1992-08/14/1995 FY94: \$45,000 TOTAL: \$128,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C L SARAZIN GSFC/R PETRE 11-Astronomy

NAG 3-1377 **University of Virginia** **8226**
MICROMECHANICS OF ADVANCED MULTI-PHASED AND FUNCTIONALLY GRADED COMPOSITES
Period *Obligations*
11/02/1992-11/02/1994 FY94: \$50,000 TOTAL: \$135,652
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M PINDER LERC/S M ARNOLD 41-Aero Engr

NAG 5-1961 **University of Virginia** **8234**
INTERDISCIPLINARY RESEARCH SCENARIO TESTING OF EOS DIS, VERSION O - SERIES 2
Period *Obligations*
04/03/1992-04/14/1995 FY94: \$105,534 TOTAL: \$211,494
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M GARSTANG GSFC/STOCKEY 39-Env Sci, NEC
G D EMMITT

NASA'S UNIVERSITY PROGRAM **VIRGINIA (Continued)**

NAGW 2377			
University of Virginia		8251	
SIS MIXER AND SCHOTT VARACTOR ELEMENTS FOR NASA SUBMILLIMETER			
<i>Period</i>	<i>Obligations</i>		
03/18/1991-12/31/1993	FY94: \$0	TOTAL: \$310,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A W LICHTENBERGER	HQ/M BICAY	13-Physics	
NAGW 2596			
University of Virginia		8252	
NAGW-2596/UNIV VIRGINIA/A LOCAL PERSPECTIVE ON GALAXY EVOLUTION IN THE EARLY UNIVERSE			
<i>Period</i>	<i>Obligations</i>		
08/20/1991-04/30/1994	FY94: \$0	TOTAL: \$518,815	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R W O'CONNELL	HQ/G S KUTTER HQ/G R RIEGLER	11-Astronomy	
NAGW 3021			
University of Virginia		8253	
ADVANCED COMPUTATIONAL METHODS FOR THE NUMERICAL SOLUTION TO METEOROLOGICAL FLOW PROBLEMS			
<i>Period</i>	<i>Obligations</i>		
03/30/1992-10/31/1994	FY94: \$90,000	TOTAL: \$230,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J J DORNING	HQ/K H BERGMAN HQ/R A SCHIFFER	31-Atmos Sci	
NAGW 3954			
University of Virginia		8254	
CHARGING OF INTERPLANETARY GRAINS			
<i>Period</i>	<i>Obligations</i>		
04/20/1994-01/31/1997	FY94: \$60,000	TOTAL: \$60,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R R BARAGIOLA	HQ/E C WHIPPLE HQ/J D BOHLIN	13-Physics	
NAGW 3959			
University of Virginia		8255	
SUBLIMATION AND OPTICAL PROPERTIES OF ICES AT LOW TEMPS RELEVANT TO SOLAR SYSTEM OBJECTS			
<i>Period</i>	<i>Obligations</i>		
04/28/1994-03/31/1995	FY94: \$25,000	TOTAL: \$25,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R BARAGIOLA	HQ/R WILLIAMS	31-Atmos Sci	
NAGW 4007			
University of Virginia		8256	
SCHOTTKY VARACTOR ELEMENTS FOR NASA			
<i>Period</i>	<i>Obligations</i>		
05/14/1994-03/31/1995	FY94: \$76,113	TOTAL: \$76,113	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T W CROWE	HQ/L J CAROFF HQ	11-Astronomy	
NAGW 4028			
University of Virginia		8257	
AN INVESTIGATION OF PLANETISMAL FORMATION			
<i>Period</i>	<i>Obligations</i>		
06/03/1994-03/02/1995	FY94: \$15,000	TOTAL: \$15,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R JOHNSON	HQ/P ROGERS	11-Astronomy	
NAGW 4029			
University of Virginia		8258	
EROSION AND ALTERATION OF INTERSTELLAR AND INTERPLANETARY GRAINS			
<i>Period</i>	<i>Obligations</i>		
06/03/1994-05/31/1995	FY94: \$15,000	TOTAL: \$15,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R JOHNSON	HQ/P ROGERS	11-Astronomy	
NAGW 4096			
University of Virginia		8259	
ESTABLISHING A PROTOTYPE ENVIRONMENT COMMUNITY ACCESS AND NETWORK PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/08/1994-08/31/1994	FY94: \$99,000	TOTAL: \$99,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J C FRENCH	HQ/K M SCHAEFFER	22-Computer Science	
NAGW 4106			
University of Virginia		8260	
LOCAL PERSPECTIVE ON GALAXY EVOLUTION			
<i>Period</i>	<i>Obligations</i>		
08/09/1994-06/30/1995	FY94: \$192,861	TOTAL: \$192,861	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P R O'CONNELL	HQ/G R RIEGLER	11-Astronomy	
NAS 3-26571			
University of Virginia		8261	
ALGORITHM FOR OPTIMIZATION OF RESIDUAL STRESSES IN MMC USING THE MULTIPLE COMPLAINT INTERFACIAL LAYER			
<i>Period</i>	<i>Obligations</i>		
03/02/1992-12/02/1994	FY94: \$0	TOTAL: \$206,755	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M J PINDER	LERC/S M ARNOLD	46-Mech Engr	
NCA 2-708			
University of Virginia		8262	
EXTRACTING DEPTH FROM MOTION IN STRUCTURED AND IMP OVERSHED TERRAINS			
<i>Period</i>	<i>Obligations</i>		
05/01/1992-08/31/1994	FY94: \$0	TOTAL: \$70,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D PROFFITT	ARC/M K KAISER	69-Psych, NEC	
NCC 1-106			
University of Virginia		8263	
CONVECTIVE TRANSPORTS OVER THE AMAZON BASIN			
<i>Period</i>	<i>Obligations</i>		
06/30/1986-03/30/1994	FY94: \$0	TOTAL: \$567,256	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M GARSTANG	LARC/J W DREWRY LARC/J M HOELL	31-Atmos Sci	
NCC 1-173			
University of Virginia		8264	
AN INTEGRATED DESIGN METHODOLOGY BASED ON THE VHSC HARDWARE DESCRIPTION LANGUAGE			
<i>Period</i>	<i>Obligations</i>		
03/16/1993-12/31/1994	FY94: \$20,000	TOTAL: \$55,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B W JOHNSON	LARC/C R ELKS	22-Computer Science	
J H AYLOR			
NCC 1-197			
University of Virginia		8265	
DESIGN FABRICATION AND TESTING OF NANOSCALE, ULTRA HIGH FREQUENCY METAL-SEMICONDUCTOR-METAL PHOTO...			
<i>Period</i>	<i>Obligations</i>		
07/29/1994-07/31/1995	FY94: \$23,000	TOTAL: \$23,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E TOWE	LARC/J A NCADOO LARC/S P SANDFORD	45-Elec Engr	
NCC 2-5024			
University of Virginia		8266	
EFFECTS OF HUMIDITY SWINGS ON ADSORPTION COLUMNS FOR AIR REVITALIZATION: MODELING AND EXPERIMENTS			
<i>Period</i>	<i>Obligations</i>		
12/21/1993-01/15/1996	FY94: \$40,000	TOTAL: \$40,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M D LE VAN	ARC/J E FINN	43-Chem Engr	

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NCC 2-5074	University of Virginia	8267	NGT 00-050-725	University of Virginia	8276
PERCEPTUALLY-TUNED VISUAL SIMULATION			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
06/30/1994-08/31/1996	FY94: \$40,000	TOTAL: \$40,000	04/25/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D R	ARC/M K KAISER	69-Psych, NEC	T W CROWE	HQ/F C OWENS	45-Elec Engr
NCCW 11	University of Virginia	8268	NGT 00-050-750	University of Virginia	8277
CENTER FOR COMPUTATIONAL STRUCTURES TECHNOLOGY			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
07/12/1990-06/30/1994	FY94: \$0	TOTAL: \$1,257,955	05/10/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A K NOOR	HQ/S L VENNERI	49-Engr, NEC	A L MILLS	HQ/F C OWENS	39-Env Sci, NEC
NGT 00-030-028	University of Virginia	8269	NGT 00-050-775	University of Virginia	8278
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
11/02/1990-08/31/1993	FY94:	TOTAL: \$65,135	06/10/1991-06/30/1993	FY94: \$0	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J F WEISHAMPEL	HQ/G ASRAR	39-Env Sci, NEC	S A MACKO	HQ/F C OWENS	12-Chemistry
NGT 00-030-157	University of Virginia	8270	NGT 00-050-793	University of Virginia	8279
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
11/02/1992-08/31/1995	FY94: \$22,000	TOTAL: \$66,000	06/27/1991-06/30/1993	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M A LEFSKY	HQ/G ASRAR	39-Env Sci, NEC	J J DORNING	HQ/F C OWENS	49-Engr, NEC
	HQ/D E WICKLAND				
NGT 00-050-568	University of Virginia	8271	NGT 00-050-820	University of Virginia	8280
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
07/09/1990-05/31/1993	FY94:	TOTAL: \$65,699	06/25/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J J DORING	HQ/F C OWENS	13-Physics	A W LICHTENBERGER	HQ/F C OWENS	45-Elec Engr
NGT 00-050-578	University of Virginia	8272	NGT 00-050-821	University of Virginia	8281
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
06/20/1990-05/31/1994	FY94: \$0	TOTAL: \$77,000	06/25/1991-06/30/1995	FY94: \$11,000	TOTAL: \$77,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B W JOHNSON	HQ/F C OWENS	45-Elec Engr	J J DORNING	HQ/F C OWENS	13-Physics
NGT 00-050-647	University of Virginia	8273	NGT 00-050-897	University of Virginia	8282
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
07/02/1990-06/30/1994	FY94: \$0	TOTAL: \$66,000	08/18/1992-06/30/1994	FY94: \$0	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S H JONES	HQ/F C OWENS	45-Elec Engr	J C MCDANIEL	LARC/E PRIOR	41-Aero Engr
NGT 00-050-714	University of Virginia	8274	NGT 00-050-905	University of Virginia	8283
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
07/02/1991-06/30/1994	FY94: \$3,250	TOTAL: \$66,000	05/21/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G LAUFER	HQ/F C OWENS	46-Mech Engr	R BARAGIOLA	HQ/J ALEXANDER	49-Engr, NEC
NGT 00-050-722	University of Virginia	8275	NGT 00-050-906	University of Virginia	8284
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
<i>Period</i>			<i>Obligations</i>		
05/10/1991-06/30/1995	FY94: \$22,000	TOTAL: \$88,000	05/21/1992-08/31/1995	FY94: \$22,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M GARSTANG	HQ/F C OWENS	39-Env Sci, NEC	R A BARAGIOLA	HQ/J ALEXANDER	49-Engr, NEC

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NGT 00-050-941	University of Virginia	8285	NASA GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
07/09/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C R KNOSPE	LERC/F MONTEGANI	46-Mech Engr	
NGT 00-050-970	University of Virginia	8286	NASA GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
06/15/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A S GRIMSHAW	HQ/P HUNTER	22-Computer Science	
NGT 00-051-018	University of Virginia	8287	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
05/14/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J C FRENCH	GSFC/G SOFFEN	22-Computer Science	
NGT 00-051-055	University of Virginia	8288	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
07/25/1993-08/31/1996	FY94: \$0	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
N NANDHAKUMAR	HQ/J T LYNCH	45-Elec Engr	
NGT 00-051-063	University of Virginia	8289	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
06/01/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J J DORNING	HQ/G LESANE	13-Physics	
NGT 00-051-068	University of Virginia	8290	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
06/15/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E TOWE	HQ/G LASANE	45-Elec Engr	
NGT 00-051-094	University of Virginia	8291	GRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
<i>Period</i>	<i>Obligations</i>		
07/07/1993-06/30/1995	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L U LILLEHEHET	GSFC/M BURRELL	43-Chem Engr	
NGT 00-051-114	University of Virginia	8292	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
05/27/1993-06/30/1996	FY94: \$31,500	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E A THORNTON	LARC/E J PRIOR	49-Engr, NEC	
NGT 00-051-163	University of Virginia	8293	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
06/22/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A S GRIMSHAW	HQ/P HUNTER	22-Computer Science	
NGT 00-051-221	University of Virginia	8294	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
05/16/1994-05/31/1997	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J J DORNING	HQ/A NOVOTNY	49-Engr, NEC	
NGT 00-051-243	University of Virginia	8295	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
07/06/1994-05/31/1995	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H HAJ-HARIRI	LERC/F MONTEGANI	46-Mech Engr	
NGT 00-051-326	University of Virginia	8296	GRADUATE STUDENT RESEARCHERS PROGRAM
<i>Period</i>	<i>Obligations</i>		
06/28/1994-07/31/1997	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T W CROWE	HQ/D HOLLAND	45-Elec Engr	
NGT 00-070-163	University of Virginia	8297	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
<i>Period</i>	<i>Obligations</i>		
09/15/1989-08/31/1993	FY94: \$0	TOTAL: \$62,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J M ORTEGA	HQ/F C OWENS	29-Math/Computer, NEC	
NGT 00-070-164	University of Virginia	8298	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
<i>Period</i>	<i>Obligations</i>		
09/18/1989-08/31/1993	FY94: \$0	TOTAL: \$62,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J M ORTEGA	HQ/F C OWENS	29-Math/Computer, NEC	
NGT 00-070-166	University of Virginia	8299	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
<i>Period</i>	<i>Obligations</i>		
09/21/1989-12/31/1992	FY94:	TOTAL: \$61,997	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R J MATTAUCH	HQ/F C OWENS	45-Elec Engr	
NGT 00-070-173	University of Virginia	8300	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
<i>Period</i>	<i>Obligations</i>		
07/05/1990-07/31/1994	FY94: \$4,339	TOTAL: \$70,339	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J L HUDSON	HQ/F C OWENS	43-Chem Engr	
NGT 00-070-229	University of Virginia	8301	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM
<i>Period</i>	<i>Obligations</i>		
07/02/1991-06/30/1995	FY94: \$22,000	TOTAL: \$88,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J M ORTEGA	HQ/F C OWENS	29-Math/Computer, NEC	

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NGT 00-070-230 University of Virginia 8302
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/05/1991-06/30/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W D PILKEY HQ/F C OWENS 44-Civil Engr

NGT 00-070-286 University of Virginia 8303
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
07/09/1992-12/31/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C FRENCH HQ/D K RUSSELL 22-Computer Science

NGT 00-070-294 University of Virginia 8304
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/04/1992-07/31/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H HAJ-HARIRI LARC/J T LYNCH 46-Mech Engr

NGT 00-070-336 University of Virginia 8305
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
07/05/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E TOWE HQ/D K RUSSELL 45-Elec Engr

NGT 00-070-339 University of Virginia 8306
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/30/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T PETERSON HQ/D K RUSSELL 21-Mathematics

NGT 00-070-365 University of Virginia 8307
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
09/08/1993-05/31/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D BALL HQ/D K RUSSELL 79-Soc Sci, NEC

NGT 00-090-214 University of Virginia 8308
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period *Obligations*
09/23/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R JENNINGS HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-232 University of Virginia 8309
UNIV VIRGINIA; UNDERGRADUATE STUDENT RESEARCHERS
PROGRAM
Period *Obligations*
11/22/1993-08/14/1994 FY94: \$12,000 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R JENNINGS HQ/D K RUSSELL 99-Multi-Discip

NAG 1-168 Va Polytechnic Inst & St Univ 8310
STRUCTURAL OPTIMIZATION FOR IMPROVED DAMAGE
TOLERANCE
Period *Obligations*
04/03/1981-12/15/1994 FY94: \$126,238 TOTAL: \$1,149,679
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R T HAFTKA LARC/J H STARNES JR. 41-Aero Engr

NAG 1-224 Va Polytechnic Inst & St Univ 8311
AUTOMATED SIZING OF AEROSPACE STRUCTURES UNDER
MULTIPLE CONSTRAINTS
Period *Obligations*
10/16/1981-11/30/1994 FY94: \$80,000 TOTAL: \$1,066,942
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R T HAFTKA LARC/H M ADELMAN 41-Aero Engr
W L HALLAUER

NAG 1-225 Va Polytechnic Inst & St Univ 8312
IDENTIFICATION AND CONTROL OF A BEAM IN SPACE
Period *Obligations*
11/30/1981-08/15/1993 FY94: \$1 TOTAL: \$566,262
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L MEIROVITCH LARC/J P WILLIAMS 42-Astro Engr
H BARAH LARC/S L WELCH

NAG 1-343 Va Polytechnic Inst & St Univ 8313
NASA MATERIALS SCIENCE AND ENGINEERING PROGRAM
Period *Obligations*
03/04/1983-12/31/1994 FY94: \$662,911 TOTAL: \$8,724,895
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F W STEPHENSON LARC/D R TENNEY 47-Materials Engr
LARC/R T SWANN

NAG 1-390 Va Polytechnic Inst & St Univ 8314
AN ANALYTICAL INVESTIGATION SYNCROPHASING AS MEANS OF
AIRCRAFT INTERIOR NOISE CONTROL
Period *Obligations*
08/01/1983-01/14/1995 FY94: \$257,202 TOTAL: \$1,282,224
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C R FULLER LARC/R J SILCOX 41-Aero Engr
LARC/H C LESTER

NAG 1-537 Va Polytechnic Inst & St Univ 8315
POSTBUCKLING AND CRIPLING OF GRAPHITE-EPOXY CHANNEL
AND ZEE SECTION COLUMNS
Period *Obligations*
10/31/1984-10/31/1994 FY94: \$50,454 TOTAL: \$407,631
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E R JOHNSON LARC/J H STARNES JR. 41-Aero Engr

NAG 1-643 Va Polytechnic Inst & St Univ 8316
DESIGN OF ANISOTROPIC PLATES FOR IMPROVED DAMAGE T
OLERANCE
Period *Obligations*
02/12/1986-12/15/1994 FY94: \$48,400 TOTAL: \$323,603
Prin. Invest. *NASA Tech. Officer* *CASE Category*
Z GURDAL LARC/J H STARNES 41-Aero Engr
LARC/M J SHUART

NAG 1-776 Va Polytechnic Inst & St Univ 8317
COMPUTATIONAL FLUID DYNAMICS RESEARCH IN HYPER-SONIC
FLOW
Period *Obligations*
06/04/1987-11/30/1994 FY94: \$31,555 TOTAL: \$801,386
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R W WALTERS LARC/D H RUDY 41-Aero Engr
B GROSSMAN LARC/J L THOMAS

NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)

NAG 1-859 **Va Polytechnic Inst & St Univ** **8318**
 FEASIBILITY STUDY OF A SYNTHESIS PROCEDURE FOR ARR AY
 FEEDS TO IMPROVE RADIATION OF LARGE DISTORTED
Period *Obligations*
 02/26/1988-04/30/1994 FY94: \$2,309 TOTAL: \$415,996
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W L STUTZMAN LARC/M C BAILEY 45-Elec Engr
 LARC/T G CAMPBELL

NAG 1-1215 **Va Polytechnic Inst & St Univ** **8325**
 IMPROVEMENTS TO A METHOD FOR THE GEOMETRICALLY NON
 -LINEAR ANALYSIS OF COMPRESSIVELY LOADED STIFFENE
Period *Obligations*
 02/13/1991-10/31/1993 FY94: TOTAL: \$92,531
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 Z GURDAL LARC/J H STARNES 41-Aero Engr
 F STOLL

NAG 1-901 **Va Polytechnic Inst & St Univ** **8319**
 INNOVATIVE DESIGN OF COMPOSITE STRUCTURES
Period *Obligations*
 07/22/1988-12/31/1993 FY94: TOTAL: \$184,874
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 M W HYER LARC/M P NEMETH 41-Aero Engr

NAG 1-1244 **Va Polytechnic Inst & St Univ** **8326**
 ATMOSPHERIC FLIGHT GUIDANCE FOR AIRBREATHING
 HYPERSONIC VEHICLES
Period *Obligations*
 04/15/1991-12/31/1993 FY94: \$0 TOTAL: \$86,996
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 E M CLIFF LARC/D D MOERDER 42-Astro Engr
 LARC/W T SUIT

NAG 1-1098 **Va Polytechnic Inst & St Univ** **8320**
 SUBSONIC/TRANSONIC EXPANSION CORNERS, INCLUDING
 REYNOLDS NUMBER EFFECTS
Period *Obligations*
 02/16/1990-12/31/1992 FY94: TOTAL: \$52,066
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W H MASON LARC/B B GLOSS 41-Aero Engr

NAG 1-1275 **Va Polytechnic Inst & St Univ** **8327**
 SAPPHIRE OPTICAL FIBER INTERCONNECTS
Period *Obligations*
 06/21/1991-06/14/1993 FY94: \$0 TOTAL: \$90,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R G MAY LARC/K K TEDJOJUWONO 45-Elec Engr
 R O CLAUS LARC/A J ZUCKERWAR
 K A MURPHY

NAG 1-1101 **Va Polytechnic Inst & St Univ** **8321**
 CRYSTALLIZATION-STRUCTURE-PROPERTY INVESTIGATIONS OF
 SELECTED POLYIMIDES
Period *Obligations*
 03/06/1990-12/31/1993 FY94: \$1 TOTAL: \$106,393
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G L WILKES LARC/P M HERGENROTHER 12-Chemistry
 LARC/J A HINKLEY

NAG 1-1277 **Va Polytechnic Inst & St Univ** **8328**
 SKIN FRICTION GAUGE DEVELOPMENT
Period *Obligations*
 06/07/1991-05/30/1993 FY94: TOTAL: \$211,814
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J A SCHETZ LARC/G B NORTHAM 41-Aero Engr
 T E DILLER

NAG 1-1119 **Va Polytechnic Inst & St Univ** **8322**
 WAVE-NUMBER FREQUENCY SPECTRA IN A TRAILING VORTEX FOR
 BWI NOISE PREDICTION
Period *Obligations*
 04/17/1990-08/15/1993 FY94: TOTAL: \$193,434
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W J DEVENPORT LARC/T F BROOKS 41-Aero Engr
 S A GLEGG LARC/M A MARCOLINI

NAG 1-1282 **Va Polytechnic Inst & St Univ** **8329**
 RESIDUAL STRENGTH AND LIFE PREDICTION FOR COMPOSITE
 MOTOR CASES
Period *Obligations*
 05/08/1991-03/31/1995 FY94: \$0 TOTAL: \$144,392
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 K L REIFSNIDER LARC/C C POE 46-Mech Engr
 W W STINCHCOMB LARC/W S JOHNSON

NAG 1-1160 **Va Polytechnic Inst & St Univ** **8323**
 VARIABLE COMPLEXITY DESIGN STRATEGY APPLIED TO
 SUPERSONIC WING DESIGN.
Period *Obligations*
 06/26/1990-10/15/1994 FY94: \$72,274 TOTAL: \$263,332
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 B GROSSMAN LARC/P G COEN 41-Aero Engr
 W MASON
 R HAFTKA

NAG 1-1292 **Va Polytechnic Inst & St Univ** **8330**
 SAPPHIRE OPTICAL FIBER MATERIALS AND SENSORS AND HIGH
 TEMPERATURE MATERIALS ANALYSIS
Period *Obligations*
 06/21/1991-06/14/1993 FY94: \$0 TOTAL: \$139,857
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 R O CLAUS LARC/R S ROGOWSKI 49-Engr, NEC
 K A MURPHY
 R A CZARNEK

NAG 1-1186 **Va Polytechnic Inst & St Univ** **8324**
 SURFACE ANALYSIS OF NASA-LDEF MATERIALS
Period *Obligations*
 09/21/1990-09/30/1994 FY94: \$20,000 TOTAL: \$165,645
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J P WIGHTMAN LARC/W S SLEMP 12-Chemistry
 LARC/P R YOUNG

NAG 1-1300 **Va Polytechnic Inst & St Univ** **8331**
 STATIC AND DYNAMIC POSTBUCKLING BEHAVIOR OF SANDWICH
 AND SHEAR DEFORMABLE COMPOSITE FLAT AND CURVED
 PANELS
Period *Obligations*
 07/02/1991-06/30/1995 FY94: \$27,000 TOTAL: \$160,317
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 L LIBRESCU LARC/J H STARNES 41-Aero Engr
 LARC/M P NEMETH

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NAG 1-1303 Va Polytechnic Inst & St Univ 8332
RESEARCH IN THE TURBULENCE STRUCTURE OF THE NEAR WALL
REGION OF THREE-DIMENSIONAL TURBULENT BOUNDARY LAYERS
Period *Obligations*
07/02/1991-06/30/1994 FY94: \$0 TOTAL: \$188,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R L SIMPSON LARC/S K ROBINSON 41-Aero Engr

NAG 1-1325 Va Polytechnic Inst & St Univ 8333
MODEL-ASSISTED OPERATIONAL PROCESSING OF ERBE SCANNER
AND NON-SCANNER DATA
Period *Obligations*
07/23/1991-05/15/1994 FY94: \$0 TOTAL: \$136,421
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R MAHAN LARC/R B LEE 31-Atmos Sci
LARC/R J KEYNTON

NAG 1-1363 Va Polytechnic Inst & St Univ 8334
OPTICAL DISTRIBUTED SENSOR FOR FEEDBACK CONTROL
Period *Obligations*
01/27/1992-01/14/1995 FY94: \$42,000 TOTAL: \$152,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G INDEBETOUW LARC/S S WELCH 42-Astro Engr
D K LINDNER

NAG 1-1392 Va Polytechnic Inst & St Univ 8335
STRESS GRADIENTS IN COMPOSITE STRUCTURES WITH GEO
METRIC DISCONTINUITIES
Period *Obligations*
02/20/1992-02/12/1994 FY94: \$0 TOTAL: \$45,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J MORTON LARC/G L FARLEY 41-Aero Engr

NAG 1-1393 Va Polytechnic Inst & St Univ 8336
DETERMINATION OF THE NONLINEAR SHEAR RESPONSE OF
COMPOSITE
Period *Obligations*
02/20/1992-02/12/1993 FY94: \$0 TOTAL: \$21,116
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J MORTON LARC/G L FARLEY 41-Aero Engr

NAG 1-1405 Va Polytechnic Inst & St Univ 8337
OPTIMAL-TACTICAL GUIDANCE STUDIES INCREMENTALLY FUNDED
IN THE AMOUNT OF \$37,383
Period *Obligations*
03/17/1992-01/15/1994 FY94: \$27,759 TOTAL: \$115,142
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E M CLIFF LARC/K H GOODRICH 41-Aero Engr
LARC/C GRACEY

NAG 1-1411 Va Polytechnic Inst & St Univ 8338
SHAPE SENSITIVITY ANALYSIS AND DYNAMIC AEROELASTIC
RESPONSES
Period *Obligations*
03/09/1992-09/31/1995 FY94: \$57,035 TOTAL: \$161,092
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K KAPANIA LARC/J SOBIESKI 41-Aero Engr
LARC/J BARTHELEMY

NAG 1-1429 Va Polytechnic Inst & St Univ 8339
EXPERIMENTAL INVESTIGATION OF TEXTILE COMPOSITES
Period *Obligations*
03/23/1992-09/30/1993 FY94: \$0 TOTAL: \$81,237
Prin. Invest. *NASA Tech. Officer* *CASE Category*
P IFJU LARC/C C POE 47-Materials Engr
D MORRIS LARC/C E HARRIS

NAG 1-1449 Va Polytechnic Inst & St Univ 8340
AIRPLANE CONTROL ALLOCATION STUDY - NLPN 92-435
Period *Obligations*
08/07/1992-08/06/1995 FY94: \$60,000 TOTAL: \$163,595
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W C DURHAM LARC/J V FOSTER 41-Aero Engr

NAG 1-1456 Va Polytechnic Inst & St Univ 8341
MODEL-BASED STUDIES OF CERES AND ERBE TYPE SCANNING
THERMISTOR BOLOMETER RADIOMETERS
Period *Obligations*
09/29/1992-08/15/1994 FY94: \$0 TOTAL: \$96,506
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R MAHAN LARC/J W YOUNGBLOOD 31-Atmos Sci

NAG 1-1458 Va Polytechnic Inst & St Univ 8342
RELIABILITY-BASED OPTIMIZATION: AN ANALYTICAL EXPERIMENTAL
STUDY - NLPN 91-1255
Period *Obligations*
11/16/1992-11/09/1994 FY94: \$58,854 TOTAL: \$98,854
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E NIKOLAIDIS LARC/W J STROUD 49-Engr, NEC
H H CUDNEY

NAG 1-1462 Va Polytechnic Inst & St Univ 8343
VIBRATION SUPPRESSION IN THE EVOLUTIONARY MODEL
Period *Obligations*
12/23/1992-12/14/1993 FY94: \$0 TOTAL: \$84,880
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J INMAN LARC/W K BELVIN 49-Engr, NEC

NAG 1-1466 Va Polytechnic Inst & St Univ 8344
ADJOINT METHODS FOR AERODYNAMIC WING DESIGN
Period *Obligations*
12/11/1992-12/10/1994 FY94: \$49,119 TOTAL: \$82,178
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B GROSSMAN LARC/M D SALAS 41-Aero Engr
R P NARDUCCI LARC/T A ZANG

NAG 1-1500 Va Polytechnic Inst & St Univ 8345
EVALUATION OF HIGH TEMPERATURE SUPERCONDUCTIVE
THERMAL BRIDGES FOR SPACE BORNE CRYOGENIC INFRARED
SPECTROMETERS
Period *Obligations*
04/15/1993-05/14/1995 FY94: \$35,470 TOTAL: \$73,907
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E P SCOTT LARC/S A WISE 47-Materials Engr
K M LEE

NAG 1-1507 Va Polytechnic Inst & St Univ 8346
DEVELOPMENT OF METHODOLOGIES FOR THE ESTIMATION OF
THERMAL PROPERTIES ASSOCIATED WITH AEROSPACE VEHICLE
Period *Obligations*
04/30/1993-04/30/1995 FY94: \$31,936 TOTAL: \$58,959
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E P SCOTT LARC/C J CAMARDA 46-Mech Engr
LARC/J H STARNES

NAG 1-1508 Va Polytechnic Inst & St Univ 8347
OPTICAL FIBER SENSOR FOR DAMAGE ANALYSIS IN AEROSPACE
MATERIALS NLPN 93-321
Period *Obligations*
05/25/1993-06/30/1994 FY94: \$30,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R O CLAUS LARC/R S ROGOWSKI 45-Elec Engr

NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)

NAG 1-1538 **Va Polytechnic Inst & St Univ** **8348**
HEAT FLUX INSTRUMENTATION FOR HYFLITE THERMAL
PROTECTION SYSTEM
Period *Obligations*
08/13/1993-01/12/1994 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer*
T DILLER LARC/G B NORTHAM CASE Category
41-Aero Engr

NAG 1-1539 **Va Polytechnic Inst & St Univ** **8349**
FLOW STRUCTURE GENERATED BY PERPENDICULAR BLADE VO
RTEX INTERACTION AND IMPLICATIONS FOR HELICOPTER
Period *Obligations*
10/21/1993-10/18/1994 FY94: \$68,170 TOTAL: \$68,170
Prin. Invest. *NASA Tech. Officer*
W J DEVENPORT LARC/T F BROOKS CASE Category
S A GLEGG LARC/C L BURTLEY 41-Aero Engr

NAG 1-1562 **Va Polytechnic Inst & St Univ** **8350**
VARIABLE-COMPLEXITY MULTIDISCIPLINARY OPTIMIZATION ON
PARALLEL COMPUTERS
Period *Obligations*
12/07/1993-12/06/1994 FY94: \$199,703 TOTAL: \$199,703
Prin. Invest. *NASA Tech. Officer*
B GROSSMAN LARC/P A NEWMAN CASE Category
R T HAFTKA LARC/P G COEM 41-Aero Engr
W H MASON

NAG 1-1573 **Va Polytechnic Inst & St Univ** **8351**
FLIGHT CONTROL REQUIREMENTS FOR HIGH SPEED TRANSPORT
AIRCRAFT
Period *Obligations*
01/13/1994-01/10/1995 FY94: \$73,955 TOTAL: \$73,955
Prin. Invest. *NASA Tech. Officer*
M R ANDERSON LARC/M R WASZAK CASE Category
W H MASON LARC/C S BUTTRILL 41-Aero Engr

NAG 1-1598 **Va Polytechnic Inst & St Univ** **8352**
TROPOSPHERIC CHEMISTRY - DEVELOPING AND UTILIZING
COMPREHENSIVE THREE-DIMENSIONAL CHEMISTRY/TROPOSPH
Period *Obligations*
02/28/1994-02/23/1995 FY94: \$9,671 TOTAL: \$9,671
Prin. Invest. *NASA Tech. Officer*
L K PETERS LARC/H G REICHLE JR. CASE Category
LARC/V S CONNORS 31-Atmos Sci

NAG 1-1608 **Va Polytechnic Inst & St Univ** **8353**
DURABILITY AND DAMAGE TOLERANCE OF HIGH TEMPERATURE
POLYMERIC COMPOSITES (HTPC)
Period *Obligations*
02/09/1994-02/08/1995 FY94: \$30,000 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer*
K L REIFSNIDER LARC/W S JOHNSON CASE Category
LARC/C E HARRIS 47-Materials Engr

NAG 1-1621 **Va Polytechnic Inst & St Univ** **8354**
DIFFERENTIAL EEG PATTERN ACTIVITY DURING SUSTAINED
ATTENTION PERFORMANCE: IMPLICATIONS
Period *Obligations*
05/16/1994-01/27/1995 FY94: \$40,628 TOTAL: \$40,628
Prin. Invest. *NASA Tech. Officer*
H J CRAWFORD LARC/A T POPE CASE Category
LARC/J R COMSTOCK 69-Psych, NEC

NAG 1-1622 **Va Polytechnic Inst & St Univ** **8355**
DETERMINATION OF STRESS INTENSITY FACTOR DISTRIBUTIONS
FOR INTERFACE CRACKS IN INCOMPRESSIB
Period *Obligations*
05/20/1994-08/14/1995 FY94: \$54,240 TOTAL: \$54,240
Prin. Invest. *NASA Tech. Officer*
C W SMITH LARC/C E HARRIS CASE Category
LARC/J C NEWMAN 46-Mech Engr

NAG 1-1640 **Va Polytechnic Inst & St Univ** **8356**
A SYSTEMS APPROACH TO EVALUATION OF INFLIGHT CALIBRATION
AND DATA REDUCTION FOR CHANNELS
Period *Obligations*
08/25/1994-08/31/1995 FY94: \$78,529 TOTAL: \$78,529
Prin. Invest. *NASA Tech. Officer*
J R MAHAN LARC/R B LEE III CASE Category
LARC/J E NEALY 31-Atmos Sci

NAG 2-919 **Va Polytechnic Inst & St Univ** **8357**
LANDING GEAR INTEGRATION IN AIRCRAFT CONCEPTUAL DE
SIGN
Period *Obligations*
07/19/1994-06/30/1995 FY94: \$49,763 TOTAL: \$49,763
Prin. Invest. *NASA Tech. Officer*
W H MASON ARC/P A GELHAUSEN CASE Category
ARC/S HASAN 41-Aero Engr

NAG 3-830 **Va Polytechnic Inst & St Univ** **8358**
EXPER STDY SUPERSONIC THROUGH FLOW CASCADE
Period *Obligations*
11/02/1987-01/13/1995 FY94: \$60,741 TOTAL: \$453,376
Prin. Invest. *NASA Tech. Officer*
W F NG LERC/D L TWEEDT CASE Category
J A SCHETZ LERC/R D MOORE 41-Aero Engr

NAG 3-1211 **Va Polytechnic Inst & St Univ** **8359**
TIME RESOLVED MEASUREMENTS FOR THE UNDERSTANDING O F
MULTISTAGE COMPRESSOR FLOW PHYSICS
Period *Obligations*
12/07/1990-12/23/1993 FY94: \$0 TOTAL: \$111,675
Prin. Invest. *NASA Tech. Officer*
W F NG LERC/K L SUDER CASE Category
41-Aero Engr

NAG 3-1266 **Va Polytechnic Inst & St Univ** **8360**
ADVANCED COMPRESSION SYSTEMS MODELING AND ANALYSIS
Period *Obligations*
07/03/1991-02/11/1995 FY94: \$0 TOTAL: \$250,332
Prin. Invest. *NASA Tech. Officer*
W F O'BRIEN LERC/G A BOBULA CASE Category
46-Mech Engr

NAG 3-1285 **Va Polytechnic Inst & St Univ** **8361**
HEAT TRANSFER MEASUREMENTS FOR STIRLING MACHINE CY
LINDERS
Period *Obligations*
05/30/1991-08/15/1994 FY94: \$0 TOTAL: \$102,872
Prin. Invest. *NASA Tech. Officer*
A A KORNHAUSER LERC/S M GENG CASE Category
46-Mech Engr

NAG 3-1349 **Va Polytechnic Inst & St Univ** **8362**
SPACE STATION POWER SYSTEM MODELING AND STABILITY AN
ALYSIS
Period *Obligations*
05/22/1992-07/31/1997 FY94: \$237,375 TOTAL: \$637,376
Prin. Invest. *NASA Tech. Officer*
F C LEE LERC/B A MANNERS CASE Category
B H CHO 45-Elec Engr
D SABLE

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NAG 3-1521 **Va Polytechnic Inst & St Univ** **8363**
APPLICATION OF PARALLEL COMPUTER DYNAMIC MODEL IN A
COMPRESSOR TEST ENVIRONMENT
Period *Obligations*
09/24/1993-10/23/1994 FY94: \$0 TOTAL: \$34,590
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W F OBRIEN LERC/A K OWEN 41-Aero Engr

NAG 3-1539 **Va Polytechnic Inst & St Univ** **8364**
AEROACOUSTICS OF A TWO-DIMENSIONAL DIFURCATED
SUPERSONIC INLET
Period *Obligations*
09/28/1993-10/14/1994 FY94: \$83,550 TOTAL: \$93,550
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W NG LERC/R P WOODWARD 41-Aero Engr

NAG 3-1562 **Va Polytechnic Inst & St Univ** **8365**
CHARACTERIZATION AND DEVELOPMENT OF THIN FILM HEAT F
LUX SENSORS
Period *Obligations*
01/14/1994-01/13/1995 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S B DESU LERC/G C FRALICK 47-Materials Engr

NAG 3-1643 **Va Polytechnic Inst & St Univ** **8366**
HEAT FLUX INSTRUMENTATION FOR HYFLITE THERMAL PROT
ECTION SYSTEM
Period *Obligations*
07/11/1994-12/31/1994 FY94: \$50,000 TOTAL: \$50,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T E DILLER LERC/H A WILL 47-Materials Engr
LERC/G C FRALICK

NAG 3-1667 **Va Polytechnic Inst & St Univ** **8367**
ADVANCED DYNAMICS SIMULATIONS
Period *Obligations*
09/22/1994-03/21/1995 FY94: \$48,857 TOTAL: \$48,857
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W F OBRIEN LERC/A R OWEN 41-Aero Engr

NAG 5-659 **Va Polytechnic Inst & St Univ** **8368**
MULTIHEAM RADAR ALTIMETER ALGORITHM DEVELOPMENT
Period *Obligations*
09/01/1989-12/31/1994 FY94: \$13,084 TOTAL: \$36,784
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G S BROWN GSFC/C L PARSONS 45-Elec Engr
GSFC/G S HAYNE

NAGW 2926 **Va Polytechnic Inst & St Univ** **8369**
A COMPARATIVE EVALUATION OF LANDSAT TM AND SPOT HR V
IN DIFFERENTIATING VEGETATIVE FORMATIONS
Period *Obligations*
02/19/1992-12/31/1993 FY94: \$0 TOTAL: \$56,557
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J O BROWDER HQ/R E MURPHY 32-Geological Sci
HQ/D M BUTLER

NAS 1-19610 **Va Polytechnic Inst & St Univ** **8370**
RESEARCH IN AERODYNAMICS, CHEMISTRY, INSTRUMENTATI ON,
AND OTHER FIELDS
Period *Obligations*
07/24/1992-07/23/1998 FY94: \$1,047,448 TOTAL: \$1,941,477
Prin. Invest. *NASA Tech. Officer* *CASE Category*
LARC/E J PRIOR 99-Multi-Discip

NAS 3-26827 **Va Polytechnic Inst & St Univ** **8371**
IN-SITU ACOUSTO-ULTRASONIC NDE TECHNIQUE TO ASSES S
DAMAGE IN CERAMIC COMPOSITES
Period *Obligations*
11/05/1992-02/18/1996 FY94: \$13,889 TOTAL: \$130,664
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E G HENNEKE LERC/A VARY 47-Materials Engr

NAS 5-31442 **Va Polytechnic Inst & St Univ** **8372**
HIGH POWERED SPACE POWER SYSTEM HARDWARE TESTBED
Period *Obligations*
02/11/1991-08/31/1994 FY94: \$70,573 TOTAL: \$786,696
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F C LEE GSFC/J M JAGIELSKI 45-Elec Engr
B H CHO GSFC/G E RODRIQUEZ

NCA 2-625 **Va Polytechnic Inst & St Univ** **8373**
A FINITE ELEMENT WING BOX MODELLING FOR AN ENSEARO
BASED AREOELASTIC ANALYSIS
Period *Obligations*
06/17/1991-12/14/1993 FY94: \$0 TOTAL: \$63,989
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K KAPANIA ARC/G P GURUSWAMY 41-Aero Engr

NCA 2-800 **Va Polytechnic Inst & St Univ** **8374**
SKIN FRICTION GAGES FOR IMPULSE TUNNELS
Period *Obligations*
04/02/1993-03/31/1994 FY94: \$0 TOTAL: \$25,066
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A SCHETZ ARC/G S DEIWERT 41-Aero Engr

NCA 2-838 **Va Polytechnic Inst & St Univ** **8375**
AERELASTIC ANALYSIS OF ADVANCED WINGS USING ENSAER O
AND A DETAILED FINITE ELEMENT STRUCTURAL MODEL
Period *Obligations*
08/25/1993-03/14/1995 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K KAPANIA ARC/G P GURUSWAMY 41-Aero Engr

NCC 1-158 **Va Polytechnic Inst & St Univ** **8376**
AIRCRAFT CONTROL REQUIREMENT STUDIES
Period *Obligations*
07/17/1991-08/31/1994 FY94: \$8,135 TOTAL: \$297,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F H LUTZE LARC/J V FOSTER 41-Aero Engr
W H MASON

NCC 2-691 **Va Polytechnic Inst & St Univ** **8377**
INFRARED IMAGING OF JET PLUMES AS A VALIDATION TE CHNIQUE
FOR CFD CODES USED IN STOVL APPLICATIONS
Period *Obligations*
08/24/1990-08/14/1994 FY94: \$0 TOTAL: \$140,463
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R MAHAN ARC/L D BIRCKELBAW 41-Aero Engr
ARC/S B WILSON

NCC 2-5036 **Va Polytechnic Inst & St Univ** **8378**
OPTIMIZATION OF AN ASCT WING-BODY CONFIGURATION US ING
EULER EQUATIONS
Period *Obligations*
02/16/1994-01/31/1996 FY94: \$35,983 TOTAL: \$35,983
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K KAPANIA ARC/G P GURUSWAMY 41-Aero Engr

NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)

NCC 2-5040 Va Polytechnic Inst & St Univ 8379
SKIN FRICTION MEASUREMENTS IN THE 16 INCH SHOCK TU NNEL
AND HYPULSE
Period *Obligations*
03/01/1994-12/31/1994 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A SCHETZ ARC/G S DEIWERT 41-Aero Engr

NCC 2-5097 Va Polytechnic Inst & St Univ 8380
AEROELASTIC ANALYSIS OF MODERN COMPLEX WINGS USING
ENSAERO AND NASTRAN
Period *Obligations*
08/29/1994-09/15/1996 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R K KAPANIA ARC/G P GURUSWAMY 41-Aero Engr

NGT 00-010-025 Va Polytechnic Inst & St Univ 8381
NGT 10025/B VA. POLYT. INST. (MDAFP) 10/1/93 START
Period *Obligations*
11/22/1993-10/31/1994 FY94: \$49,677 TOTAL: \$49,677
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B GROSSMAN HQ/G S SEIDEL 41-Aero Engr
R T HAFTKA HQ/J R FACEY
W H MASON

NGT 00-050-565 Va Polytechnic Inst & St Univ 8382
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/29/1990-05/15/1994 FY94: \$0 TOTAL: \$77,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G KIRK HQ/F C OWENS 46-Mech Engr

NGT 00-050-754 Va Polytechnic Inst & St Univ 8383
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/01/1991-06/30/1993 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T PRATT HQ/F C OWENS 45-Elec Engr

NGT 00-050-978 Va Polytechnic Inst & St Univ 8384
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/24/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D P TELIONIS LARC/E PRIOR 41-Aero Engr

NGT 00-050-988 Va Polytechnic Inst & St Univ 8385
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/11/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LAPORTE HQ/P BACON 79-Soc Sci, NEC

NGT 00-051-108 Va Polytechnic Inst & St Univ 8386
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
07/05/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J R MAHN LARC/E PRIOR 46-Mech Engr

NGT 00-051-116 Va Polytechnic Inst & St Univ 8387
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/28/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A DILLARD LARC/E PRIOR 46-Mech Engr

NGT 00-051-117 Va Polytechnic Inst & St Univ 8388
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/25/1993-06/30/1994 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G L WILKES LARC/E PRIOR 43-Chem Engr

NGT 00-051-174 Va Polytechnic Inst & St Univ 8389
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/03/1993-08/31/1994 FY94: \$3,166 TOTAL: \$25,166
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R T HAFTKA LARC/E PRIOR 41-Aero Engr

NGT 00-051-249 Va Polytechnic Inst & St Univ 8390
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E P SCOTT LARC/L EVANS 46-Mech Engr

NGT 00-051-278 Va Polytechnic Inst & St Univ 8391
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/14/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J LAPORTE HQ/P BACON 79-Soc Sci, NEC
W DUGGER

NGT 00-070-269 Va Polytechnic Inst & St Univ 8392
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/26/1992-08/14/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
U VANDSBORGER LARC/E J PRIOR 46-Mech Engr

NGT 00-070-295 Va Polytechnic Inst & St Univ 8393
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
11/13/1992-12/31/1993 FY94: \$0 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W L STUTZMAN LARC/E PRIOR 45-Elec Engr

NGT 00-070-298 Va Polytechnic Inst & St Univ 8394
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
09/16/1992-08/14/1994 FY94: \$0 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L A ROC LARC/E PRIOR 46-Mech Engr

**NASA'S UNIVERSITY PROGRAM
VIRGINIA (Continued)**

NGT 00-070-318 Va Polytechnic Inst & St Univ 8395
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
06/29/1993-06/30/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T POON HQ/D K RUSSELL 45-Elec Engr

NGT 00-070-360 Va Polytechnic Inst & St Univ 8396
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/31/1993-08/01/1993 FY94: TOTAL: \$0
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R BURDISO HQ/D K RUSSELL 99-Multi-Discip

NGT 00-070-395 Va Polytechnic Inst & St Univ 8397
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
09/02/1994-06/30/1997 FY94: \$44,000 TOTAL: \$44,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W NG HQ/D K RUSSELL 46-Mech Engr
J R ARMSTRONG

NGT 00-070-399 Va Polytechnic Inst & St Univ 8398
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
07/15/1994-07/31/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C R FULLER LARC/R L YANG 46-Mech Engr

NGT 00-090-104 Va Polytechnic Inst & St Univ 8399
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NOTTINGHAM HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-105 Va Polytechnic Inst & St Univ 8400
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/24/1992-08/14/1994 FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NOTTINGHAM HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-106 Va Polytechnic Inst & St Univ 8401
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM (UMF)
Period *Obligations*
09/24/1992-08/14/1994 FY94: \$0 TOTAL: \$24,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NOTTINGHAM HQ/D K RUSSELL 99-Multi-Discip

NGT 00-090-203 Va Polytechnic Inst & St Univ 8402
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NOTTINGHAM HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-204 Va Polytechnic Inst & St Univ 8403
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NOTTINGHAM HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-205 Va Polytechnic Inst & St Univ 8404
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NOTTINGHAM HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-206 Va Polytechnic Inst & St Univ 8405
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
08/27/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NOTTINGHAM HQ/D RUSSELL 99-Multi-Discip

NGT 00-090-215 Va Polytechnic Inst & St Univ 8406
UNDERGRADUATE STUDENT RESEARCHERS (UMF) PROGRAM
Period *Obligations*
09/23/1993-08/14/1994 FY94: \$0 TOTAL: \$12,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J NOTTINGHAM HQ/D K RUSSELL 99-Multi-Discip

NAG 1-695 Virginia Commonwealth University 8407
DEVELOPMENT OF ACOUSTIC TEST APPARATUS FOR EVALUATION
OF THE STATE OF THE HUMAN AIRWAYS
Period *Obligations*
08/07/1986-12/31/1993 FY94: TOTAL: \$90,450
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L PATTERSON LARC/J SAMOS 56-Medical Sciences
LARC/J M SEINER

NAG 1-1251 Virginia Commonwealth University 8408
NOVEL POLYMER SYNTHESIS
Period *Obligations*
06/11/1991-11/30/1994 FY94: \$104,769 TOTAL: \$278,473
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R G BASS LARC/P M HERGENROTHER 12-Chemistry
LARC/B J JENSEN

NAG 9-412 Virginia Commonwealth University 8409
RELEVANCE OF BAROREFLEX TO HUMAN CARDIOVASCULAR
ADJUSTMENTS TO WEIGHTLESSNESS
Period *Obligations*
03/08/1990-09/01/1995 FY94: \$110,000 TOTAL: \$466,800
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L ECKBERG JSC/S M FURTNEY 51-Biological Sci
M L SMITH

NAS 9-16046 Virginia Commonwealth University 8410
INFLUENCE WEIGHTLESSNESS CARDIOVASCULAR
Period *Obligations*
01/17/1980-06/01/1995 FY94: \$0 TOTAL: \$3,920,419
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D L ECKBERG JSC/W J YOUNG 59-Life Sci, NEC

NASA'S UNIVERSITY PROGRAM VIRGINIA (Continued)

NGT 00-090-174 Virginia Commonwealth University 8411
UNDERGRADUATE STUDENT RESEARCHERS PROGRAM
Period 08/27/1993-08/14/1995 *Obligations* FY94: \$12,000 TOTAL: \$24,000
Prin. Invest. J BERLUND *NASA Tech. Officer* HQ/D RUSSELL *CASE Category* 99-Multi-Discip

NAG 1-416 Virginia State University 8412
SOLID STATE PHYSICS RESEARCH PROGRAM
Period 09/15/1983-06/30/1995 *Obligations* FY94: \$0 TOTAL: \$1,158,343
Prin. Invest. C E STRONACH *NASA Tech. Officer* LARC/J W WILSON *CASE Category* 19-Phys Sci, NEC
R I GRYSZPAN LARC/W E MEADOR
J J STITH

NAG 1-765 Virginia State University 8413
COMPUTER SIMULATION OF RADIATION DAMAGE IN SEMI-CONDUCTORS AND POLYMERS
Period 05/27/1987-06/30/1994 *Obligations* FY94: \$0 TOTAL: \$419,527
Prin. Invest. J J STITH *NASA Tech. Officer* LARC/J W WILSON *CASE Category* 19-Phys Sci, NEC
J C DAVENPORT

NAG 1-1527 Virginia State University 8414
EFFECTS OF GALACTIC COSMIC RADIATION ON SPACE MATERIALS NLPN 92-1202R
Period 07/12/1993-12/31/1994 *Obligations* FY94: \$0 TOTAL: \$3,950
Prin. Invest. C E STRONACH *NASA Tech. Officer* LARC/J W WILSON *CASE Category* 13-Physics
LARC/E J CONWAY

WASHINGTON

NAG 5-2270 Central Washington University 8415
APPLIC. OF HIGH RESOLUTION TOPOGRAPHY AND REMOTE SENSING IMAGERY TO THE KINEMATICS OF FOLD-AND-
Period 05/26/1993-06/14/1994 *Obligations* FY94: \$0 TOTAL: \$25,000
Prin. Invest. M RUBIN *NASA Tech. Officer* GSFC/G BILLS *CASE Category* 32-Geological Sci

NAG 5-2271 Central Washington University 8416
KINEMATICS AND EVOLUTION OF TRANS-PENINSULAR SLIP IN NORTHERN BAJA, CALIFORNIA
Period 05/26/1993-06/14/1995 *Obligations* FY94: \$0 TOTAL: \$25,279
Prin. Invest. M MILLER *NASA Tech. Officer* GSFC/G BILLS *CASE Category* 32-Geological Sci

NAGW 3464 Central Washington University 8417
ACTIVE DEFORMATION IN THE MOJAVE DESERT REGION AND THE WALKER LANE BELT
Period 04/23/1993-02/28/1994 *Obligations* FY94: \$0 TOTAL: \$150,655
Prin. Invest. M M MILLER *NASA Tech. Officer* HQ/M BALTUCK *CASE Category* 32-Geological Sci
M P GOLOMBEK
R K DOKKA

NAGW 3691 Central Washington University 8418
APPLICATION OF HIGH RESOLUTION TOPOGRAPHY AND REMOTE SENSING IMAGERY TO THE KINEMATICS OF FOLD
Period 08/25/1993-08/31/1994 *Obligations* FY94: \$0 TOTAL: \$31,615
Prin. Invest. C RUBIN *NASA Tech. Officer* HQ/M BALTUCK *CASE Category* 32-Geological Sci

NAGW 3826 Central Washington University 8419
SATELLITE-BASED INVESTIGATIONS OF THE TRANSITION FROM AN OCEANIC TO CONTINENTAL TRANSFORM MARGIN
Period 12/09/1993-11/30/1995 *Obligations* FY94: \$104,377 TOTAL: \$104,377
Prin. Invest. M MILLER *NASA Tech. Officer* HQ/M BALTUCK *CASE Category* 32-Geological Sci

NAG 8-1000 Northwest Indian College 8420
JOVE
Period 11/24/1993-05/31/1995 *Obligations* FY94: \$54,173 TOTAL: \$54,173
Prin. Invest. D BURNS *NASA Tech. Officer* MSFC/F SIX *CASE Category* 54-Env Biology
C D WESTER

NAGW 3622 Northwest Indian College 8421
SEAQUEST OUTDOOR LAB FOR NATIVE AMERICANS
Period 05/28/1993-09/30/1994 *Obligations* FY94: \$0 TOTAL: \$75,000
Prin. Invest. R LORENCE *NASA Tech. Officer* ARC/A HATCH *CASE Category* 39-Env Sci, NEC
HQ/B WHITE

NAG 1-1210 University of Washington 8422
SYSTEM THEORETIC STUDIES OF H - OPTIMIZATION AND ALTERNATE NON ARE BASED DESIGN APPROACHES
Period 12/19/1990-12/31/1993 *Obligations* FY94: \$0 TOTAL: \$204,635
Prin. Invest. U L LY *NASA Tech. Officer* LARC/C M BELCASTRO *CASE Category* 41-Aero Engr
A SABERI

NAG 1-1404 University of Washington 8423
QUANTIFYING THE STRENGTH OF THE BREWER-DOBSON CIRCULATION AND OTHER STRAT-TROP EXCHANGE PROCESSES
Period 03/13/1992-03/11/1995 *Obligations* FY94: \$69,996 TOTAL: \$210,108
Prin. Invest. K K TUNG *NASA Tech. Officer* LARC/E E REMSBERG *CASE Category* 31-Atmos Sci

NAG 1-1495 University of Washington 8424
SAFETY OF PROCESS - CONTROL SOFTWARE NLPN 93-223
Period 04/19/1993-04/18/1995 *Obligations* FY94: \$112,433 TOTAL: \$178,433
Prin. Invest. N G LEVESON *NASA Tech. Officer* LARC/D E ECKHARDT *CASE Category* 22-Computer Science

NAG 1-1586 University of Washington 8425
FATIGUE CRACK GROWTH IN UNSYMMETRICALLY LOADED THIN CYLINDERS NLPN 93-711
Period 01/14/1994-01/13/1995 *Obligations* FY94: \$52,262 TOTAL: \$52,262
Prin. Invest. I M FYFE *NASA Tech. Officer* LARC/J C NEWMAN JR. *CASE Category* 46-Mech Engr
LARC/C E HARRIS

**NASA'S UNIVERSITY PROGRAM
WASHINGTON (Continued)**

NAG 1-1628	University of Washington	8426	CONTRIBUTIONS TO AIRPLANE CONFIGURATION AERO ELASTIC SHAPE OPTIMIZATION (MY 1/3)
<i>Period</i> 05/31/1994-06/30/1995	<i>Obligations</i> FY94: \$50,000	<i>TOTAL:</i> \$50,000	
<i>Prin. Invest.</i> E LIVINE	<i>NASA Tech. Officer</i> LARC/J F BARTHELEMY	<i>CASE Category</i> 41-Aero Engr	
NAG 2-629	University of Washington	8427	A UNIFIED DESIGN ALGORITHM FOR H2 AND H** - NORM OPTIMIZATION AND ITS APPLICATION TO FLIGHT CONTROL
<i>Period</i> 03/28/1994-03/14/1993	<i>Obligations</i> FY94: \$0	<i>TOTAL:</i> \$121,514	
<i>Prin. Invest.</i> U LY	<i>NASA Tech. Officer</i> ARC/J GERA ARC/H H LAMBERT	<i>CASE Category</i> 41-Aero Engr	
NAG 2-682	University of Washington	8428	PROPOSAL TO STUDY GRAVITY WAVE BREAKDOWN
<i>Period</i> 10/19/1990-08/31/1993	<i>Obligations</i> FY94: \$0	<i>TOTAL:</i> \$24,856	
<i>Prin. Invest.</i> D R DURRAN	<i>NASA Tech. Officer</i> ARC/L J EHERNBERGER	<i>CASE Category</i> 31-Atmos Sci	
NAG 2-691	University of Washington	8429	ADVANCED ROTORCRAFT CONTROL USING NONLINEAR CONSTRAINED OPTIMIZATION
<i>Period</i> 02/07/1991-12/31/1992	<i>Obligations</i> FY94: \$0	<i>TOTAL:</i> \$92,205	
<i>Prin. Invest.</i> U LY	<i>NASA Tech. Officer</i> ARC/M TAKAHASHI	<i>CASE Category</i> 41-Aero Engr	
NAG 2-698	University of Washington	8430	MOP SEARCH STRATEGIES AND INTERPRETATIONS
<i>Period</i> 03/22/1991-09/30/1994	<i>Obligations</i> FY94: \$22,020	<i>TOTAL:</i> \$229,718	
<i>Prin. Invest.</i> W T SULLIVAN	<i>NASA Tech. Officer</i> ARC/D H BROCKER	<i>CASE Category</i> 11-Astronomy	
NAG 2-723	University of Washington	8431	STRUCTURAL MODELING OF LIFTING SURFACE CONFIGURATIONS FOR AIRPLANE MULTI-DISCIPLINARY
<i>Period</i> 07/30/1991-09/30/1994	<i>Obligations</i> FY94: \$41,633	<i>TOTAL:</i> \$171,995	
<i>Prin. Invest.</i> E LIVNE	<i>NASA Tech. Officer</i> ARC/H MIURA ARC/P A GELHAUSEN	<i>CASE Category</i> 99-Multi-Discip	
NAG 2-777	University of Washington	8432	NASA COLLABORATIVE STUDIES ON THE RADIATIVE EFFECTS OF CLOUDS
<i>Period</i> 04/14/1992-01/31/1995	<i>Obligations</i> FY94: \$195,430	<i>TOTAL:</i> \$492,430	
<i>Prin. Invest.</i> P V HOBBS	<i>NASA Tech. Officer</i> ARC/P PILEWSKIE ARC/M V KLUG	<i>CASE Category</i> 31-Atmos Sci	
NAG 2-831	University of Washington	8433	SYSTEMATIC GENERATION, OPTIMIZATION, AND ADAPTATION OF GRIDS FOR COMPLEX THREE-DIMENSIONAL SHAPES
<i>Period</i> 04/02/1993-04/30/1995	<i>Obligations</i> FY94: \$0	<i>TOTAL:</i> \$53,265	
<i>Prin. Invest.</i> G TURKIYYAH	<i>NASA Tech. Officer</i> ARC/T A LASINSKI	<i>CASE Category</i> 22-Computer Science	
NAG 3-376	University of Washington	8434	AN INVESTIGATION OF 3-D BOUNDARY LAYER FLOWS IN SUBSONIC DIFFUSERS
<i>Period</i> 12/07/1982-01/03/1995	<i>Obligations</i> FY94: \$100,000	<i>TOTAL:</i> \$912,743	
<i>Prin. Invest.</i> F B GESSNER	<i>NASA Tech. Officer</i> LERC/W R HINGST LERC/A R PORRO	<i>CASE Category</i> 41-Aero Engr	
NAG 3-1486	University of Washington	8435	PRESSURE WAVE MACHINES AS TOPPING UNITS FOR GAS TURBINES
<i>Period</i> 04/15/1993-02/08/1994	<i>Obligations</i> FY94: \$0	<i>TOTAL:</i> \$20,144	
<i>Prin. Invest.</i> J J KELLER	<i>NASA Tech. Officer</i> LERC/G J SKOCH	<i>CASE Category</i> 41-Aero Engr	
NAG 3-1595	University of Washington	8436	PRESSURE WAVE MACHINE DEVELOPMENT
<i>Period</i> 06/07/1994-01/06/1995	<i>Obligations</i> FY94: \$63,877	<i>TOTAL:</i> \$63,877	
<i>Prin. Invest.</i> J J KELLER	<i>NASA Tech. Officer</i> LERC/G SKOCH	<i>CASE Category</i> 41-Aero Engr	
NAG 5-668	University of Washington	8437	EXTENDED LIFE BALLOON OBSERVATORIES
<i>Period</i> 05/04/1990-12/31/1994	<i>Obligations</i> FY94: \$0	<i>TOTAL:</i> \$365,000	
<i>Prin. Invest.</i> R H HOLZWORTH	<i>NASA Tech. Officer</i> GSFC/H C NEEDLEMAN GSFC/I S SMITH	<i>CASE Category</i> 13-Physics	
NAG 5-677	University of Washington	8438	MICROBURST ELECTRON PRECIPITATION
<i>Period</i> 03/29/1991-05/31/1995	<i>Obligations</i> FY94: \$59,073	<i>TOTAL:</i> \$539,213	
<i>Prin. Invest.</i> G K PARKS	<i>NASA Tech. Officer</i> GSFC/L J EARLY GSFC/R H PLESS	<i>CASE Category</i> 13-Physics	
NAG 5-685	University of Washington	8439	MIDDLE ATMOSPHERE ELECTRODYNAMICS DURING A THUNDERSTORM
<i>Period</i> 05/29/1991-05/30/1995	<i>Obligations</i> FY94: \$20,000	<i>TOTAL:</i> \$238,038	
<i>Prin. Invest.</i> R H HOLZWORTH	<i>NASA Tech. Officer</i> GSFC/H C NEEDLEMAN GSFC/I S SMITH	<i>CASE Category</i> 13-Physics	
NAG 5-1444	University of Washington	8440	ULTRAVIOLET COLORS OF YOUNG LMC CLUSTERS
<i>Period</i> 08/20/1990-01/31/1995	<i>Obligations</i> FY94: \$11,910	<i>TOTAL:</i> \$50,500	
<i>Prin. Invest.</i> P W HODGE	<i>NASA Tech. Officer</i> GSFC/D WEST	<i>CASE Category</i> 11-Astronomy	
NAG 5-1518	University of Washington	8441	THE DYNAMICAL EVOLUTION OF GLOBULAR CLUSTERS AND A SEARCH FOR CATAclysmic VARIABLES IN GLOBULAR CLUST
<i>Period</i> 04/02/1991-03/31/1996	<i>Obligations</i> FY94: \$12,500	<i>TOTAL:</i> \$65,168	
<i>Prin. Invest.</i> B H MARGON	<i>NASA Tech. Officer</i> GSFC/R PETRE	<i>CASE Category</i> 11-Astronomy	

NASA'S UNIVERSITY PROGRAM WASHINGTON (Continued)

NAG 5-1599 University of Washington 8442
STUDIES OF TROPICAL RAIN SYSTEMS FOR TRMM VALIDATION
Period *Obligations*
05/13/1991-05/31/1995 FY94: \$175,000 TOTAL: \$552,030
Pnn Invest *NASA Tech Officer* *CASE Category*
R A HOUZE GSFC/O THIELE 31-Atmos Sci

NAG 5-2303 University of Washington 8450
EUVE SPECTROSCOPY OF EXPOSED WDS IN 3 CATAclysmic
VARIABLES: PROBING ACCRETION PHYSICS
Period *Obligations*
06/30/1993-07/14/1995 FY94: \$0 TOTAL: \$20,000
Pnn Invest *NASA Tech Officer* *CASE Category*
P A SZKODY GSFC/R OLIVERSEN 11-Astronomy

NAG 5-1623 University of Washington 8443
X-RAY ANALYSIS OF A LARGE COMPLETE QSO SAMPLE
Period *Obligations*
06/07/1991-06/14/1994 FY94: \$0 TOTAL: \$41,377
Pnn Invest *NASA Tech Officer* *CASE Category*
S F ANDERSON GSFC/R PETRE 11-Astronomy

NAG 5-2315 University of Washington 8451
COORDINATED VOYAGER OBSERVATIONS OF V603 AQI
Period *Obligations*
07/12/1993-07/14/1995 FY94: \$0 TOTAL: \$5,000
Pnn Invest *NASA Tech Officer* *CASE Category*
P SZKODY GSFC/R OLIVERSEN 11-Astronomy

NAG 5-1847 University of Washington 8444
SUDDEN CLIMATE CHANGE: THE LAND SURFACE RECORD
Period *Obligations*
12/10/1991-12/31/1993 FY94: \$0 TOTAL: \$157,730
Pnn Invest *NASA Tech Officer* *CASE Category*
A R GILLESPIE GSFC/L S WALTER 32-Geological Sci
J B ADAMS

NAG 5-2356 University of Washington 8452
TARGET OF OPPORTUNITY: TT CRT AND YY DRA AT OUTBURST
Period *Obligations*
08/26/1993-09/14/1995 FY94: \$0 TOTAL: \$2,000
Pnn Invest *NASA Tech Officer* *CASE Category*
P SZKODY GSFC/D WEST 11-Astronomy

NAG 5-1927 University of Washington 8445
S193: LOOKING DOWN THE ACCRETION AXIS
Period *Obligations*
03/04/1992-03/14/1995 FY94: \$40,000 TOTAL: \$84,525
Pnn Invest *NASA Tech Officer* *CASE Category*
P SZKODY GSFC/R PETRE 11-Astronomy

NAG 5-5011 University of Washington 8453
ELECTRIC FIELD AND OPTICAL STUDIES OF LIGHTNING GENERATED
PULSES
Period *Obligations*
05/12/1993-12/31/1995 FY94: \$143,552 TOTAL: \$208,652
Pnn Invest *NASA Tech Officer* *CASE Category*
R H HOLZWORTH GSFC/L J EARLY 13-Physics
GSFC/R H PLESS

NAG 5-1984 University of Washington 8446
OBSERVATIONS OF TWO RECENT SYMBIOTIC NOVAE
Period *Obligations*
05/12/1992-05/31/1994 FY94: \$0 TOTAL: \$40,000
Pnn Invest *NASA Tech Officer* *CASE Category*
G WALLERSTEIN GSFC/R PETRE 11-Astronomy

NAG 8-207 University of Washington 8454
PULSE TIMING STUDIES OF X-RAY PULSARS
Period *Obligations*
08/28/1991-12/23/1995 FY94: \$22,475 TOTAL: \$148,151
Pnn Invest *NASA Tech Officer* *CASE Category*
J E DEETER MSFC/J VARGAS 11-Astronomy
P E BOYNTON

NAG 5-2114 University of Washington 8447
DISK PRECESSION IN THE MAGNETIC OLD NOVA V603 AQI
Period *Obligations*
10/08/1992-01/31/1995 FY94: \$16,910 TOTAL: \$24,500
Pnn Invest *NASA Tech Officer* *CASE Category*
P A SZKODY GSFC/D WEST 11-Astronomy

NAG 9-84 University of Washington 8455
STUDY FORMATION OF CUMULATE ROCKS
Period *Obligations*
03/01/1984-05/01/1994 FY94: \$0 TOTAL: \$437,001
Pnn Invest *NASA Tech Officer* *CASE Category*
I S MCCALLUM JSC/I D BROWNE 32-Geological Sci

NAG 5-2213 University of Washington 8448
LARGE SCALE STRUCTURE AND GALAXY FORMATION
Period *Obligations*
02/18/1993-11/30/1994 FY94: \$490,000 TOTAL: \$809,000
Pnn Invest *NASA Tech Officer* *CASE Category*
G LAKE GSFC/J R FISCHER 11-Astronomy
L ADAMS
J BARDEEN

NAG 9-604 University of Washington 8456
MECHANOSENSORY TRANSDUCTION IN MAMMALIAN CILIATED
CELLS
Period *Obligations*
05/15/1992-06/01/1995 FY94: \$60,000 TOTAL: \$179,991
Pnn Invest *NASA Tech Officer* *CASE Category*
P VERDUGO JSC/C F SAMS 51-Biological Sci

NAG 5-2294 University of Washington 8449
FROM MICROSCALE TO MESOSCALE: SNOWMELT, SOIL MOISTURE
AND EVAPOTRANSPIRATION USING DISTRIBUTED...
Period *Obligations*
06/22/1993-06/30/1995 FY94: \$55,000 TOTAL: \$75,000
Pnn Invest *NASA Tech Officer* *CASE Category*
D P LETTENMAIER GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 9-637 University of Washington 8457
LPEF CRATER CHEMISTRY
Period *Obligations*
09/02/1992-02/01/1994 FY94: \$0 TOTAL: \$30,000
Pnn Invest *NASA Tech Officer* *CASE Category*
D E BROWNLEE JSC/F HORZ 11-Astronomy

NASA'S UNIVERSITY PROGRAM **WASHINGTON (Continued)**

NAG 9-683				University of Washington		8458		NAGW 1322				University of Washington		8466	
LDEF MICROCRATER ANALYSIS								RELATIONSHIPS BETWEEN WIND, WAVES, AND RADAR BACKSCATTER							
<i>Period</i>				<i>Obligations</i>				<i>Period</i>				<i>Obligations</i>			
04/26/1993-10/31/1994				FY94: \$0		TOTAL: \$30,000		06/27/1988-11/30/1994				FY94: \$30,000		TOTAL: \$389,418	
<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>		<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>	
D E BROWNLEE				JSC/M ZOLENSKY		11-Astronomy		K B KATSAROS				HQ/G S LAGERLOEF		33-Oceanography	
												HQ/W S WILSON			
NAG 9-703				University of Washington		8459		NAGW 1436				University of Washington		8467	
DEVELOPMENT AND IMPLEMENTATION OF PREFLIGHT ADAPTATION								SATELLITE STUDIES OF ICE EDGE AND POLYNYA PROCESSES							
<i>Period</i>				<i>Obligations</i>				<i>Period</i>				<i>Obligations</i>			
08/30/1993-08/01/1995				FY94: \$50,000		TOTAL: \$100,000		08/12/1988-12/31/1994				FY94: \$83,799		TOTAL: \$600,984	
<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>		<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>	
D E PARKER				JSC/D L HARM		56-Medical Sciences		S MARTIN				HQ/R H THOMAS		33-Oceanography	
												HQ/W S WILSON			
NAG 9-753				University of Washington		8460		NAGW 1605				University of Washington		8468	
AEROGEL IMPACT ANALYSIS								ZONALLY-AVERAGED MODEL OF DYNAMIC CHEMISTRY							
<i>Period</i>				<i>Obligations</i>				<i>Period</i>				<i>Obligations</i>			
07/07/1994-08/01/1995				FY94: \$25,000		TOTAL: \$25,000		12/30/1988-11/30/1994				FY94: \$41,949		TOTAL: \$509,978	
<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>		<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>	
D E BROWNLEE				JSC/F HORZ		31-Atmos Sci		K K TUNG				HQ/R D MCPETERS		31-Atmos Sci	
												HQ/M J PRATHER			
NAGW 328				University of Washington		8461		NAGW 1702				University of Washington		8469	
IMPACT CRATER SCALING LAWS								THEORY AND APPLICATIONS OF DISCRETE SCATTERER MODELS							
<i>Period</i>				<i>Obligations</i>				<i>Period</i>				<i>Obligations</i>			
06/01/1982-10/31/1993				FY94: \$0		TOTAL: \$483,891		03/17/1989-12/31/1994				FY94: \$64,690		TOTAL: \$318,300	
<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>		<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>	
K A HOLSAPPLE				HQ/J R UNDERWOOD		32-Geological Sci		L TSANG				HQ/G ASRAR		13-Physics	
				HQ/J M BOYCE								HQ/T J PIEPER			
NAGW 471				University of Washington		8462		NAGW 1734				University of Washington		8470	
INVESTIGATIONS OF STRATOSPHERIC DYNAMICS AND TRANSPORT USING NIMBUS SATELLITE DATA								OPTICAL PROPERTIES OF CO2-ICE AND CO2-SNOW IN THE VISIBLE							
<i>Period</i>				<i>Obligations</i>				<i>Period</i>				<i>Obligations</i>			
06/02/1983-01/31/1994				FY94: \$0		TOTAL: \$1,250,616		05/01/1989-11/30/1992				FY94:		TOTAL: \$70,754	
<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>		<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>	
C B LEOVY				HQ/R D MCPETERS		31-Atmos Sci		S G WARREN				HQ/J R UNDERWOOD		32-Geological Sci	
D L HARTMAN				HQ/M J PRATHER											
NAGW 662				University of Washington		8463		NAGW 1770				University of Washington		8471	
WANE DYNAMICS AND TRANSPORT IN THE STRATOSPHERE								MESOSCALE STORMS/FRONTS STUDY W/SATELLITE WINDS							
<i>Period</i>				<i>Obligations</i>				<i>Period</i>				<i>Obligations</i>			
12/01/1984-12/31/1995				FY94: \$100,000		TOTAL: \$1,216,245		06/09/1989-09/30/1993				FY94: \$0		TOTAL: \$290,950	
<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>		<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>	
J R HOLTON				HQ/R D MCPETERS		31-Atmos Sci		R A BROWN				HQ/J C DODGE		31-Atmos Sci	
				HQ/M J PRATHER								HQ/J THEON			
NAGW 844				University of Washington		8464		NAGW 2009				University of Washington		8472	
ISOTOPIC BIOGEOCHEMICAL STUDY OF WETLAND METHANE								MICROBURST ELECTRON PRECIPITATION							
<i>Period</i>				<i>Obligations</i>				<i>Period</i>				<i>Obligations</i>			
10/01/1985-06/30/1994				FY94: \$0		TOTAL: \$1,505,409		05/05/1990-09/30/1992				FY94:		TOTAL: \$49,186	
<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>		<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>	
P D QUAY				HQ/M J KURYLO		39-Env Sci, NEC		G K PARKS				HQ/M M MELLOTT		13-Physics	
S L KING				HQ/R T WATSON								HQ/T PERRY			
G FARWELL															
NAGW 1256				University of Washington		8465		NAGW 2156				University of Washington		8473	
SEA ICE TYPE DISCRIMINATION USING POLARIMETRIC SYNTHETIC								NAGW-2156/UNIV OF WASHINGTON/DEVELOPMENT OF IMAGE ANALYSIS EQUIPMENT AND TECHNOLOGIES FOR EFFICIENT							
<i>Period</i>				<i>Obligations</i>				<i>Period</i>				<i>Obligations</i>			
12/22/1987-02/28/1995				FY94: \$102,718		TOTAL: \$615,924		07/10/1990-09/03/1993				FY94: \$0		TOTAL: \$38,174	
<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>		<i>Prin. Invest.</i>				<i>NASA Tech. Officer</i>		<i>CASE Category</i>	
D P WINEBRENNER				HQ/R H THOMAS		33-Oceanography		R J WILKES				HQ/W V JONES		13-Physics	
				HQ/W S WILSON								HQ/J C LING			

**NASA'S UNIVERSITY PROGRAM
WASHINGTON (Continued)**

<p>NAGW 2275 University of Washington 8474 NAGW-2275/UNIV WASHINGTON/SPECTRAL REFLECTANCE OF PLANETARY SURFACES <i>Period</i> <i>Obligations</i> 02/14/1991-10/31/1994 FY94: \$50,000 TOTAL: \$190,000 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> J B ADAMS HQ/T A MAXWELL 32-Geological Sci</p>	<p>NAGW 2574 University of Washington 8482 A COUPLED THERMODYNAMIC/STRONG FLUCTUATION THEORY MODEL OF MICROWAVE EMISSION FROM ICE IN POLAR OCNS <i>Period</i> <i>Obligations</i> 08/16/1991-12/31/1994 FY94: \$108,703 TOTAL: \$365,591 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> T C GRENFELL HQ/R H THOMAS 33-Oceanography G A MAYKUT HQ/R A SCHIFFER</p>
<p>NAGW 2407 University of Washington 8475 POLAR EXCHANGE AT THE SEA SURFACE (POLES); THE INT ERACTION OF OCEANS, ICE, AND ATMOSPHERE <i>Period</i> <i>Obligations</i> 04/11/1991-12/31/1994 FY94: \$960,000 TOTAL: \$3,258,565 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D A ROTHROCK HQ/R H THOMAS 33-Oceanography S MARTIN HQ/W S WILSON R BROWN</p>	<p>NAGW 2633 University of Washington 8483 CLIMATE PROCESSES OVER THE OCEAN <i>Period</i> <i>Obligations</i> 07/15/1991-12/31/1994 FY94: \$564,000 TOTAL: \$1,888,000 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D L HARTMANN HQ/J C DODGE 31-Atmos Sci HQ/W S WILSON</p>
<p>NAGW 2512 University of Washington 8476 SEA ICE MOTION IN THE PACIFIC SECTOR OF THE ARCTIC BASIN <i>Period</i> <i>Obligations</i> 07/10/1991-04/30/1994 FY94: \$0 TOTAL: \$268,136 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> R COLONY HQ/R H THOMAS 33-Oceanography HQ/R A SCHIFFER</p>	<p>NAGW 2652 University of Washington 8484 NAGW-2652/UNIV WASHINGTON/THE REGIONAL AMAZON MODE L: SYNOPTIC SCALE HYDROLOGICAL AND BIOGEOCHEMICAL C <i>Period</i> <i>Obligations</i> 07/25/1991-12/31/1994 FY94: \$700,000 TOTAL: \$2,690,000 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> J E RICHEY HQ/R E MURPHY 39-Env Sci, NEC HQ/W S WILSON</p>
<p>NAGW 2513 University of Washington 8477 SAR AND MICROWAVE REMOTE SENSING OF SEA ICE AND PO LAR OCEANS <i>Period</i> <i>Obligations</i> 08/16/1991-06/30/1994 FY94: \$0 TOTAL: \$521,723 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D A ROTHROCK HQ/R H THOMAS 33-Oceanography</p>	<p>NAGW 2676 University of Washington 8485 LOW MASS STARS AS DARK MATTER <i>Period</i> <i>Obligations</i> 08/06/1991-04/30/1995 FY94: \$41,800 TOTAL: \$154,400 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> G LAKE HQ/G S KUTTER 11-Astronomy HQ/G R RIEGLER</p>
<p>NAGW 2523 University of Washington 8478 COSMIC EVOLUTION <i>Period</i> <i>Obligations</i> 05/23/1991-12/31/1994 FY94: \$67,569 TOTAL: \$427,569 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> C J HOGAN HQ/G S KUTTER 11-Astronomy HQ/G R RIEGLER</p>	<p>NAGW 2743 University of Washington 8486 MAPPING ANTARCTIC OZONE IN THE 1970'S <i>Period</i> <i>Obligations</i> 09/19/1991-12/31/1994 FY94: \$65,000 TOTAL: \$223,777 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> S G WARREN HQ/J A KAYE 31-Atmos Sci HQ/R E MURPHY</p>
<p>NAGW 2550 University of Washington 8479 NAGW-25560/UNIV WASHINGTON/MARS 1994 - PARTICIPATI NG SCIENTIST <i>Period</i> <i>Obligations</i> 06/10/1991-09/30/1993 FY94: \$0 TOTAL: \$32,684 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> C LEOVY HQ/W L QUAIDE 19-Phys Sci, NEC</p>	<p>NAGW 2888 University of Washington 8487 SMALL-SCALE VARIABILITY OF INFRARED SEA SURFACE TE MPERATURE <i>Period</i> <i>Obligations</i> 02/20/1992-12/31/1994 FY94: \$76,451 TOTAL: \$277,764 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> A T JESSUP HQ/J S THEON 33-Oceanography</p>
<p>NAGW 2556 University of Washington 8480 DEVELOPMENT OF SPATIALLY DISTURBED SNOWMELT MODELS FOR ASSESSING CLIMATE CHANGE IMPACTS <i>Period</i> <i>Obligations</i> 06/13/1991-02/28/1994 FY94: \$0 TOTAL: \$311,533 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> D P LETTERMAIER HQ/G ASRAR 39-Env Sci, NEC D MARKS HQ/J S THEON</p>	<p>NAGW 2982 University of Washington 8488 MICRO WEATHER STATIONS FOR IN-SITU MEASUREMENTS IN THE MARTIAN PLANETARY BOUNDARY LAYER <i>Period</i> <i>Obligations</i> 03/16/1992-12/31/1994 FY94: \$40,232 TOTAL: \$115,413 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> J E TILLMAN HQ/W L QUAIDE 19-Phys Sci, NEC</p>
<p>NAGW 2569 University of Washington 8481 COSMIC BACKGROUND RADIATION AND COSMIC EVALUATION <i>Period</i> <i>Obligations</i> 06/24/1991-12/31/1994 FY94: \$77,500 TOTAL: \$258,200 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> C J HOGAN HQ/L J CAROFF 11-Astronomy</p>	<p>NAGW 3158 University of Washington 8489 SPACE SPECTROSCOPY OF THE WHITE DWARFS IN CATAcly MIC VARIABLES <i>Period</i> <i>Obligations</i> 08/14/1992-07/31/1995 FY94: \$175,313 TOTAL: \$294,628 <i>Prin. Invest.</i> <i>NASA Tech. Officer</i> <i>CASE Category</i> P SZKODY HQ/G R RIEGLER 11-Astronomy</p>

NASA'S UNIVERSITY PROGRAM WASHINGTON (Continued)

NAGW 3174	University of Washington	8490
NAGW-3174/UNIV CONVECTION	WASHINGTON/SEA ICE AND OCEAN	
<i>Period</i>	<i>Obligations</i>	
09/29/1992-11/30/1994	FY94: \$107,930	TOTAL: \$332,557
<i>Pnn Invest</i>	<i>NASA Tech Officer</i>	<i>CASE Category</i>
K AAGAARD	HQ/R H THOMAS	33-Oceanography
	HQ/R A SCHIFFER	

NAGW 3528	University of Washington	8498
NAGW:3528/UNIV WASHINGTON/AUTOMATED ANALYSIS OF UL TRA		
HIGH ENERGY COSMIC RAY EVENTS		
<i>Period</i>	<i>Obligations</i>	
04/21/1993-02/28/1996	FY94: \$71,100	TOTAL: \$141,100
<i>Pnn Invest</i>	<i>NASA Tech Officer</i>	<i>CASE Category</i>
R WILKES	HQ/W V JONES	13-Physics
	HQ/G L WITHBROE	

NAGW 3195		University of Washington	8491
NAGW-3195/UNIV WASHINGTON/EVALUATION OF THE FEASIBILITY OF DETERMINING CANOPY CHEMISTRY			
Period		Obligations	
09/17/1992-06/30/1994	FY94: \$75,000		TOTAL: \$150,000
Prin. Invest	NASA Tech. Officer		CASE Category
J B ADAMS	HQ/D F WICKLAND		39-Env Sci, NEC
	HO/A C JANETOS		

NAGW 3606	University of Washington	8499
PATTERNS OF CZCS OBSERVED PLANT PIGMENT IN REGIONS OF PRESENT OR FUTURE JGOFS WORK		
<i>Period</i>	<i>Obligations</i>	
05/28/1993-02/28/1995	FY94: \$127,018	TOTAL: \$268,137
<i>Prin Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
K BANSE	HQ/R E MURPHY	33-Oceanography

NAGW 3251	University of Washington	8492
NAGW:3251/UNIV	WASHINGTON/MAKING THE	INVISIBLE: TE
CHNIQUES		
<i>Period</i>		<i>Obligations</i>
10/30/1992-07/31/1994	FY94: \$0	TOTAL: \$4,994
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C J HOGAN	HQ/L LAPIANA	11-Astronomy
	HQ/G P NEWTON	

NAGW 3636	University of Washington	8500
COMPARISON OF INTERPLANETARY AND INTERSTELLAR GRAINS		
<i>Period</i>	<i>Obligations</i>	
06/17/1993-05/31/1994	FY94: \$0	TOTAL: \$19,086
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D BROWNEE	HQ/J A NUTH III	19-Phys Sci, NEC

NAGW 3287	University of Washington	8493
NAGW-3287/UNIV WASHINGTON	SEATTLE/INTERPLANETARY DUST	
<i>Period</i>	<i>Obligations</i>	
11/27/1992-12/14/1994	FY94: \$207,623	TOTAL: \$400,160
<i>Prin Invest</i>	<i>NASA Tech Officer</i>	<i>CASE Category</i>
D B BROWNLEE	HQ/H C BRINTON	32-Geological Sci

NAGW 3647	University of Washington	8501
A WETNET STUDY OF WINDS, STORMS AND AIR-SEA FLUX MODELING		
<i>Period</i>	<i>Obligations</i>	
06/29/1993-03/31/1994	FY94: \$0	TOTAL: \$120,130
<i>Prin. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R A BROWN	HQ/J C DODGE	31-Atmos Sci

NAGW 3352	University of Washington	8494
NAGW-3352/UNIV	WASHINGTON/THE	FORMATION OF CUMULATE
ROCKS		
<i>Period</i>		<i>Obligations</i>
01/26/1993-12/14/1994	FY94: \$28,500	TOTAL: \$58,500
<i>Prin Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
I S MCCALLUS	HQ/H C BRINTON	32-Geological Sci

NAGW 3650		University of Washington	8502
EQUATOR-S PLASMA RESEARCH			
Period		Obligations	
07/09/1993-02/28/1996	FY94: \$242,000		TOTAL: \$343,000
Prin. Invest.	NASA Tech. Officer		CASE Category
G K PARKS	HQ/E C WHIPPLE		13-Physics
	HQ/J D BOHLIN		

NAGW 3381	University of Washington	8495
NUMERICAL MODEL STUDIES OF THE MARTIAN MESOSCALE CIRCULATIONS		
<i>Period</i>	<i>Obligations</i>	
02/16/1993-02/28/1996	FY94: \$0	TOTAL: \$14,951
<i>Pnn. Invest</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J F TILLMAN	HQ/H C BRINTON	19-Phys Sci, NEC

NAGW 3750	University of Washington	8503
AEROSOLS FROM BIOMASS BURNING IN THE TROPICAL SAVANA		
NNAH		
<i>Period</i>	<i>Obligations</i>	
09/23/1993-11/30/1994	FY94: \$147,000	TOTAL: \$212,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P V HOBBS	HQ/J T SUTTLES	31-Atmos Sci
	HQ/A C JANETOS	

NAGW 3475		University of Washington	8496
CLOUDS, LARGE SCALE INTERACTIONS AND CLIMATE			
Period	Obligations		
03/25/1993-12/31/1995	FY94: \$151,461	TOTAL: \$295,500	
Pnn. Invest.	NASA Tech. Officer	CASE Category	
D L HARTMAN	HQ/J C DODGE	31-Atmos Sci	
	HQ/R A SCHIFFER		

NAGW 3754		University of Washington	8504
EVOLUTION OF AEROSOL SIZE DISTRIBUTION IN THE CLOUDY BOUNDARY LAYER			
Period		Obligations	
09/09/1993-08/31/1996	FY94: \$82,249		TOTAL: \$121,749
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>		<i>CASE Category</i>
M B BAKER	HQ/J T SUTTLES		31-Atmos Sci
D A HEGG	HQ/A C JANETOS		

NAGW 3527		University of Washington	8497
SCATTERMETER MODEL FUNCTION DEVELOPMENT			
Period		Obligations	
04/14/1993-02/28/1995	FY94: \$120,000		TOTAL: \$190,975
Prin. Invest.	NASA Tech. Officer		CASE Category
W J PLANT	HQ/J S THEON		32-Geological Sci

NAGW 3755	University of Washington	8505
PLASMADESMATA AND THE CONTROL OF GRAVITROPISM		
<i>Period</i>	<i>Obligations</i>	
09/28/1993-09/30/1994	FY94: \$0	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R E CLELAND	HQ/T W HALSTEAD	51-Biological Sci

**NASA'S UNIVERSITY PROGRAM
WASHINGTON (Continued)**

NAGW 3794 University of Washington 8506
PARTICIPATION IN NATO ADVANCED RESEARCH WORKSHOP ON STRATOSPHERE-TROPOSPHERE EXCHANGE
Period *Obligations*
10/13/1993-08/31/1994 FY94: \$9,379 TOTAL: \$9,379
Pnn Invest *NASA Tech Officer*
J HOLLEN HQ/J A KAYE CASE Category
HQ/R E MURPHY 39-Env Sci, NEC

NAGW 3821 University of Washington 8507
NAGW-3821/UNIV WASHINGTON/AEROSOL INFLUENCES ON RADIATION BALANCE
Period *Obligations*
11/24/1993-10/31/1994 FY94: \$26,687 TOTAL: \$26,687
Pnn Invest *NASA Tech Officer*
R CHARLSON HQ/A C JANETOS CASE Category
HQ/R T JANETOS 31-Atmos Sci

NAGW 3960 University of Washington 8508
IMPROVING ALTIMETRY USING IONOSPHERIC AND ATMOSPHERIC TOMOGRAPHY
Period *Obligations*
05/14/1994-03/31/1995 FY94: \$87,572 TOTAL: \$87,572
Pnn Invest *NASA Tech Officer*
B HOWE HQ/J S THEON CASE Category
31-Atmos Sci

NAGW 4147 University of Washington 8509
ELBBO (EXTENDED LIFE BALLOON BORNE OBSERVATORIES)
Period *Obligations*
09/28/1994-07/31/1995 FY94: \$65,000 TOTAL: \$65,000
Pnn Invest *NASA Tech Officer*
R H HOLZWORTH HQ/M M MELLOTT CASE Category
HQ/J D BOHLIN 13-Physics

NAG10-77 University of Washington 8510
ROLL OF EXTRACELLULAR CALCIUM IN PLANT GRAVITROPISM
Period *Obligations*
08/20/1990-05/20/1994 FY94: \$0 TOTAL: \$210,000
Pnn Invest *NASA Tech Officer*
R E CLELAND KSC/W M KNOTT CASE Category
51-Biological Sci

NAS 1-18940 University of Washington 8511
SAGE III SCIENCE INVESTIGATION SUPPORT, P.I. PETER V. HOBBS
Period *Obligations*
10/27/1989-01/31/1995 FY94: \$49,993 TOTAL: \$105,093
Pnn Invest *NASA Tech Officer*
P V HOBBS LARC/G MADDREA CASE Category
19-Phys Sci, NEC

NAS 5-26301 University of Washington 8512
WAVE DYNAMICS AND TRANSPORT IN THE MIDDLE ATMOSPHERE
Period *Obligations*
09/29/1980-09/30/1995 FY94: \$350,000 TOTAL: \$1,877,327
Pnn Invest *NASA Tech Officer*
J R HOLTON GSFC/C REBER CASE Category
31-Atmos Sci

NAS 5-26850 University of Washington 8513
PROVIDE DEFINITION PHASE STUDY OF A FAST AND VERSATILE 3-D PLASMA EXPERIMENT FOR THE OPEN PROJECT
Period *Obligations*
05/04/1982-11/01/1994 FY94: \$399,673 TOTAL: \$1,318,413
Pnn Invest *NASA Tech Officer*
G K PARKS GSFC/J J O'BRIEN CASE Category
13-Physics

NAS 5-30613 University of Washington 8514
INVESTIGATION DEFINITION PHASE FOR CLUSTER PLASMA SPECTROMETRY
Period *Obligations*
02/21/1989-12/31/1995 FY94: \$392,000 TOTAL: \$2,006,056
Pnn Invest *NASA Tech Officer*
G K PARKS GSFC/K STICH CASE Category
13-Physics

NAS 5-31372 University of Washington 8515
INTERMEDIATE THERMAL INFRARED RADIOMETER (EOS) INVESTIGATION
Period *Obligations*
02/19/1992-12/14/2001 FY94: \$340,000 TOTAL: \$810,000
Pnn Invest *NASA Tech Officer*
A R GILLESPIE GSFC/H BLODGET CASE Category
31-Atmos Sci

NASW 4914 University of Washington 8516
MICRO-TELEROBOTICS EXPERIMENT: 'MICRO-TREX'
Period *Obligations*
06/02/1994-03/01/1995 FY94: \$59,358 TOTAL: \$59,358
Pnn Invest *NASA Tech Officer*
B HANNAFORD HQ/G C MISENER CASE Category
46-Mech Engr

NCA 2-485 University of Washington 8517
VIDEO LUMINESCENT THERMOMETRY FOR AIR FOILS IN WIND TUNNELS
Period *Obligations*
01/03/1990-06/15/1993 FY94: \$0 TOTAL: \$75,000
Pnn Invest *NASA Tech Officer*
M GOUTERMAN ARC/B MCLACHLAN CASE Category
J B CALLIS 12-Chemistry

NCA 2-623 University of Washington 8518
DATA COLLECTION AND EVALUATION OF A NUMERICAL MODEL OF THE DMS-CLOUD-CLIMATE HYPOTHESIS
Period *Obligations*
06/18/1991-06/30/1993 FY94: \$0 TOTAL: \$63,764
Pnn Invest *NASA Tech Officer*
P V HOBBS ARC/B TOON CASE Category
31-Atmos Sci

NCA 2-658 University of Washington 8519
REFERENCE IMAGES FOR LUMINESCENT BAROMETRY
Period *Obligations*
10/01/1991-06/15/1995 FY94: \$0 TOTAL: \$80,000
Pnn Invest *NASA Tech Officer*
M GOUTERMAN ARC/B MCLACHLAN CASE Category
J B CALLIS 12-Chemistry

NCA 2-818 University of Washington 8520
A NUMERICAL STUDY OF INSTABILITIES IN THE MARINE ATMOSPHERE
Period *Obligations*
05/21/1993-03/31/1994 FY94: \$0 TOTAL: \$24,317
Pnn Invest *NASA Tech Officer*
P HOBBS ARC/B TOON CASE Category
31-Atmos Sci

NCA 2-2002 University of Washington 8521
JOINT SPONSORED RESEARCH AGREEMENT NO. 6 VIDEO LUMINESCENT BAROMETRY
Period *Obligations*
02/25/1993-12/31/1995 FY94: \$151,194 TOTAL: \$271,748
Pnn Invest *NASA Tech Officer*
M GOUTERMAN ARC/B MCLACHLAN CASE Category
ARC/S DAVIS 12-Chemistry

**NASA'S UNIVERSITY PROGRAM
WASHINGTON (Continued)**

NCC 1-156		University of Washington	8522
MULTIRATE DIGITAL CONTROL SYSTEM DESIGN FOR THE PAPA BENCHMARK WING			
<i>Period</i>	<i>Obligations</i>		
07/22/1991-07/14/1994	FY94: \$0	TOTAL: \$91,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M C BERG	LARC/V MUKHOPADHYAY	41-Aero Engr	
	LARC/M H DURHAM		
NCC 2-5084		University of Washington	8523
ANALYSIS OF NEAR IR TO MID IR IMAGING AND SPECTRO SCOPY DATA OF MARS THE MOON AND SELECTED ASTEROID			
<i>Period</i>	<i>Obligations</i>		
07/25/1994-03/31/1995	FY94: \$39,598	TOTAL: \$39,598	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J B ADAMS	ARC/Y PENDLETON	11-Astronomy	
NCC 2-5099		University of Washington	8524
DEVELOPMENT OF AN AUTOMATIC BLOCK GENERATION ALGORITHM			
<i>Period</i>	<i>Obligations</i>		
08/31/1994-05/14/1995	FY94: \$39,996	TOTAL: \$39,996	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S EBERHARDT	ARC/W VAN DALSEM	41-Aero Engr	
B KIM	ARC/D CHAUSSEE		
NGT 00-030-004		University of Washington	8525
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
10/02/1990-03/31/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M B BAKER	HQ/G ASRAR	31-Atmos Sci	
NGT 00-030-005		University of Washington	8526
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
10/02/1990-12/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
K K TUNG	HQ/G ASRAR	31-Atmos Sci	
NGT 00-030-019		University of Washington	8527
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
11/02/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A P BARROS	HQ/G ASRAR	39-Env Sci, NEC	
NGT 00-030-020		University of Washington	8528
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
10/23/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L L LANDRUM	HQ/G ASRAR	33-Oceanography	
NGT 00-030-033		University of Washington	8529
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
12/14/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D HARTMANN	HQ/G ASRAR	31-Atmos Sci	
NGT 00-030-035		University of Washington	8530
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
11/16/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J E MUENCH	HQ/G ASRAR	33-Oceanography	
NGT 00-030-043		University of Washington	8531
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/16/1991-08/31/1993	FY94: \$0	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B M PLOTKIN	HQ/D M BUTLER	31-Atmos Sci	
R GAMMON	HQ/G S WILSON		
NGT 00-030-047		University of Washington	8532
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/19/1991-03/31/1995	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R M PINCUS	HQ/D M BUTLER	31-Atmos Sci	
M BAKER	HQ/G S WILSON		
NGT 00-030-058		University of Washington	8533
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/23/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J L YOUNG	HQ/D M BUTLER	33-Oceanography	
J MURRAY	HQ/G S WILSON		
NGT 00-030-076		University of Washington	8534
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/30/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P W MOTE	HQ/D M BUTLER	31-Atmos Sci	
J R HOLTON	HQ/G S WILSON		
NGT 00-030-085		University of Washington	8535
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/19/1991-03/31/1995	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C J BEEGLE	HQ/D M BUTLER	33-Oceanography	
R GAMMON	HQ/G S WILSON		
NGT 00-030-087		University of Washington	8536
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/19/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
N J MANTUA	HQ/D M BUTLER	33-Oceanography	
E SARACHIK	HQ/G S WILSON		
NGT 00-030-092		University of Washington	8537
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/25/1991-08/31/1994	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J R NORRIS	HQ/D M BUTLER	31-Atmos Sci	
C B LEOVY	HQ/G S WILSON		

**NASA'S UNIVERSITY PROGRAM
WASHINGTON (Continued)**

NGT 00-030-100		University of Washington		8538
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM				
Period	Obligations			
11/27/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
S E YUTER	HQ/G ASRAR	99-Multi-Discip		
	HQ/J S THEON			
NGT 00-030-110		University of Washington		8539
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM				
Period	Obligations			
11/02/1992-08/31/1995	FY94: \$0	TOTAL: \$44,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
D L WORTHEN	HQ/G ASRAR	99-Multi-Discip		
	HQ/D M BUTLER			
NGT 00-030-116		University of Washington		8540
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM				
Period	Obligations			
11/02/1992-08/31/1994	FY94: \$0	TOTAL: \$44,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
L J CARLSON	HQ/G ASRAR	39-Env Sci, NEC		
	HQ/D M BUTLER			
NGT 00-030-123		University of Washington		8541
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM				
Period	Obligations			
11/02/1992-08/31/1995	FY94: \$0	TOTAL: \$44,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
W T WELCH	HQ/G ASRAR	99-Multi-Discip		
	HQ/D M BUTLER			
NGT 00-030-176		University of Washington		8542
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM				
Period	Obligations			
09/01/1993-08/31/1995	FY94: \$0	TOTAL: \$22,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
R E BREIDENTHAL	HQ/G ASRAR	31-Atmos Sci		
	HQ/D M BUTLER			
NGT 00-030-178		University of Washington		8543
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM				
Period	Obligations			
09/02/1993-08/31/1995	FY94: \$0	TOTAL: \$22,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
E RISKIN	HQ/G ASRAR	39-Env Sci, NEC		
	HQ/D M BUTLER			
NGT 00-040-011		University of Washington		8544
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM				
Period	Obligations			
09/29/1989-01/31/1995	FY94: \$345,000	TOTAL: \$1,688,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
G K PARKS	HQ/E T SCHWARTZ	99-Multi-Discip		
NGT 00-050-561		University of Washington		8545
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
07/03/1990-06/30/1993	FY94: \$0	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
M GOUTHERMAN	HQ/F C OWENS	12-Chemistry		
	J B CALLIS			
NGT 00-050-616		University of Washington		8546
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
08/31/1990-12/31/1993	FY94: \$0	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
K BANSE	HQ/F C OWENS	33-Oceanography		
NGT 00-050-652		University of Washington		8547
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
10/11/1990-08/31/1993	FY94: \$0	TOTAL: \$65,934		
Prin. Invest.	NASA Tech. Officer	CASE Category		
D A ROTHROCK	HQ/F C OWENS	31-Atmos Sci		
NGT 00-050-681		University of Washington		8548
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
10/25/1990-09/30/1993	FY94: \$0	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
M J PERRY	HQ/F C OWENS	33-Oceanography		
NGT 00-050-700		University of Washington		8549
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
07/02/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
J LORD	HQ/F C OWENS	13-Physics		
NGT 00-050-723		University of Washington		8550
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
05/13/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
M WENSMAN	HQ/F C OWENS	31-Atmos Sci		
NGT 00-050-788		University of Washington		8551
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
06/27/1991-09/15/1994	FY94: \$0	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
G K PARKS	HQ/F C OWENS	13-Physics		
NGT 00-050-812		University of Washington		8552
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
09/17/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
R WEST	HQ/J K ALEXANDER	45-Elec Engr		
NGT 00-050-822		University of Washington		8553
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
08/12/1991-09/15/1994	FY94: \$0	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
S HANKS	HQ/F C OWENS	22-Computer Science		
NGT 00-050-933		University of Washington		8554
NASA GRADUATE STUDENT RESEARCHERS PROGRAM				
Period	Obligations			
06/29/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000		
Prin. Invest.	NASA Tech. Officer	CASE Category		
M GOUTHERMAN	ARC/B HASTINGS	12-Chemistry		

**NASA'S UNIVERSITY PROGRAM
WASHINGTON (Continued)**

NGT 00-051-001 NGT-51001/UNIV RESEARCHERS PROGRAM <i>Period</i> 08/18/1992-08/31/1995 <i>Prin. Invest.</i> E J DAVIS	University of Washington WASHINGTON/GRADUATE OBLIGATIONS FY94: \$0 NASA Tech. Officer HQ/J K ALEXANDER	8555 STUDENT TOTAL: \$44,000 CASE Category 43-Chem Engr
NGT 00-051-047 GRADUATE STUDENT RESEARCHERS PROGRAM <i>Period</i> 07/23/1993-09/15/1996 <i>Prin. Invest.</i> M BAKER	University of Washington OBLIGATIONS FY94: \$0 NASA Tech. Officer MSFC/F SIX	8556 TOTAL: \$22,000 CASE Category 31-Atmos Sci
NGT 00-051-155 GRADUATE STUDENT RESEARCHERS PROGRAM <i>Period</i> 08/06/1993-09/15/1996 <i>Prin. Invest.</i> R M WINGLEE	University of Washington OBLIGATIONS FY94: \$0 NASA Tech. Officer HQ/D HOLLAND	8557 TOTAL: \$22,000 CASE Category 13-Physics
NGT 00-051-225 GRADUATE STUDENT RESEARCHERS PROGRAM <i>Period</i> 07/26/1994-08/31/1997 <i>Prin. Invest.</i> M J PERRY	University of Washington OBLIGATIONS FY94: \$22,000 NASA Tech. Officer HQ/A NOVOTNY	8558 TOTAL: \$22,000 CASE Category 33-Oceanography
NGT 00-051-279 GRADUATE STUDENT RESEARCHERS PROGRAM <i>Period</i> 06/14/1994-06/30/1997 <i>Prin. Invest.</i> S S CARLSON	University of Washington OBLIGATIONS FY94: \$22,000 NASA Tech. Officer HQ/G LESANE	8559 TOTAL: \$22,000 CASE Category 51-Biological Sci
NGT 00-051-309 GRADUATE STUDENT RESEARCHERS PROGRAM <i>Period</i> 07/06/1994-06/30/1997 <i>Prin. Invest.</i> S HANKS	University of Washington OBLIGATIONS FY94: \$22,000 NASA Tech. Officer ARC/M MOORE	8560 TOTAL: \$22,000 CASE Category 22-Computer Science
NGT 00-070-314 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM <i>Period</i> 06/29/1993-12/31/1994 <i>Prin. Invest.</i> G LAKE	University of Washington OBLIGATIONS FY94: \$0 NASA Tech. Officer HQ/D K RUSSELL	8561 TOTAL: \$22,000 CASE Category 11-Astronomy
NGT 00-070-325 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM <i>Period</i> 07/01/1993-06/30/1996 <i>Prin. Invest.</i> B MARGON	University of Washington OBLIGATIONS FY94: \$22,000 NASA Tech. Officer HQ/D K RUSSELL	8562 TOTAL: \$44,000 CASE Category 11-Astronomy
NGT 00-070-357 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM <i>Period</i> 08/31/1993-08/31/1994 <i>Prin. Invest.</i> N LEVESON	University of Washington OBLIGATIONS FY94: \$0 NASA Tech. Officer HQ/D K RUSSELL	8563 TOTAL: \$22,000 CASE Category 22-Computer Science
NSG-5398 OBSERVATIONS OF CLOSSICAL STELLAR CHSOMOSPHERES <i>Period</i> 07/15/1979-01/31/1995 <i>Prin. Invest.</i> E BOHM-VITENSE D BOGGS	University of Washington OBLIGATIONS FY94: \$11,910 NASA Tech. Officer GSFC/D WEST	8564 TOTAL: \$568,402 CASE Category 11-Astronomy
NSG-9052 STUDY OF INTERPLANETARY DUST <i>Period</i> 03/01/1977-08/01/1993 <i>Prin. Invest.</i> D E BROWNLIE	University of Washington OBLIGATIONS FY94: \$0 NASA Tech. Officer JSC/I D BROWN	8565 TOTAL: \$2,327,162 CASE Category 31-Atmos Sci
NAG 3-1387 BUBBLE DYNAMICS, TWO-PHASE FLOW AND BOILING HEAT TRA NSFER IN A MICROGRAVITY ENVIRONMENT <i>Period</i> 12/23/1992-12/14/1995 <i>Prin. Invest.</i> J N CHUNG	Washington State University OBLIGATIONS FY94: \$101,178 NASA Tech. Officer LERC/F P CHIARAMONTE	8566 TOTAL: \$206,665 CASE Category 46-Mech Engr
NAG 3-1622 STABILIZATION AND LOW FREQUENCY OSCILLATIONS OF CAPI LLARY BRIDGES WITH MODULATED ACOUSTIC RADITION PR <i>Period</i> 06/23/1994-06/22/1995 <i>Prin. Invest.</i> P L MARSTON	Washington State University OBLIGATIONS FY94: \$50,000 NASA Tech. Officer LERC/R J SKARDA	8567 TOTAL: \$50,000 CASE Category 13-Physics
NAG 9-363 RESPONSE TO ELECTRICAL MUSCLE SIMULATION <i>Period</i> 07/01/1989-07/01/1993 <i>Prin. Invest.</i> P D GOLLNICK	Washington State University OBLIGATIONS FY94: NASA Tech. Officer JSC/V SCHNEIDER	8568 TOTAL: \$400,199 CASE Category 56-Medical Sciences
NAG 9-545 DIFFERENTIAL EFFECTS OF IODINE AND IODIDE ON THYROID FUNCTION IN HUMANS <i>Period</i> 09/25/1991-09/01/1994 <i>Prin. Invest.</i> R J BULL	Washington State University OBLIGATIONS FY94: \$0 NASA Tech. Officer JSC/R SAUER	8569 TOTAL: \$249,726 CASE Category 59-Life Sci, NEC
NAGW 2823 DETAILED THREE-DIMENSIONAL RECONSTRUCTION OF ASTER OIDS FROM RADAR OBSERVATIONS <i>Period</i> 01/03/1992-01/31/1994 <i>Prin. Invest.</i> S HUDSON	Washington State University OBLIGATIONS FY94: \$0 NASA Tech. Officer HQ/J K ALEXANDER HQ/D A HOLLAND	8570 TOTAL: \$107,162 CASE Category 11-Astronomy

NASA'S UNIVERSITY PROGRAM **WASHINGTON (Continued)**

NAGW 3672 Washington State University 8571
PLANT METABOLISM AND CELL WALL FORMATION IN SPACE
(MICROGRAVITY) AND ON EARTH
Period *Obligations*
07/05/1993-05/31/1994 FY94: \$70,000 TOTAL: \$140,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
N G LEWIS HQ/T W HALSTEAD 51-Biological Sci

NAGW 3807 Washington State University 8572
CALCIUM MESSENGER SYSTEM
Period *Obligations*
10/28/1993-06/30/1995 FY94: \$125,000 TOTAL: \$125,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B W POOVAIAH HQ/T W HALSTEAD 51-Biological Sci

NAG10-61 Washington State University 8573
CALCIUM MESSENGER SYSTEM IN GRAVITROPIC RESPONSE IN PLANTS
Period *Obligations*
07/01/1989-09/30/1993 FY94: \$0 TOTAL: \$195,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
B W POOVAIAH KSC/W KNOTT 13-Physics

NCC 2-794 Washington State University 8574
INTEGRATE PATTERN COMPLETION AND SYNTACTIC LEARNING IN THE CONTEXT OF INTELLIGENT ASSISTANCE FOR FORM..
Period *Obligations*
01/01/1993-09/30/1994 FY94: \$79,253 TOTAL: \$129,253
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J C SCHLIMMER ARC/P E FRIEDLAND 22-Computer Science
ARC/P LAIRD

NCC 2-5052 Washington State University 8575
LAMINAR FLOW AND SKIN FRICTION MEASUREMENTS ON WIN G MODELS
Period *Obligations*
05/06/1994-12/30/1994 FY94: \$35,687 TOTAL: \$35,687
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R V WESTPHAL ARC/R A KENNELLY 41-Aero Engr

NGT 00-050-904 Washington State University 8576
NASA GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
05/21/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J N CHONG HQ/J ALEXANDER 46-Mech Engr

NGT 00-051-027 Washington State University 8577
GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
06/23/1993-06/30/1996 FY94: \$7,000 TOTAL: \$29,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C PEZESKI HQ/J T LYNCH 46-Mech Engr

NAG 8-213 Western Washington University 8578
JOVE
Period *Obligations*
01/28/1992-05/31/1995 FY94: \$17,348 TOTAL: \$111,917
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D ENGELATON MSFC/F SIX 54-Env Biology
J HARDY
R RUGLEY

WEST VIRGINIA

NAG 8-255 Fairmont State College 8579
JOVE
Period *Obligations*
02/03/1993-11/30/1994 FY94: \$0 TOTAL: \$29,124
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M S CANLON MSFC/F SIX 99-Multi-Discip

NCCW 50 Fairmont State College 8580
LOW COST IN-SITU CORRELATIVE MEASUREMENT PROJECT T O VALIDATE REMORELY SENSED DATA
Period *Obligations*
07/20/1994-03/31/1996 FY94: \$100,000 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C WHITE HQ/K NIEWOEHNER 31-Atmos Sci

NAGW 3435 Marshall University 8581
DEVELOPMENT OF EXERCISE PRESCRIPTIONS AND EQUIPMENT FOR SPACE TRAVEL
Period *Obligations*
03/05/1993-12/31/1993 FY94: \$0 TOTAL: \$170,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
G A DUDLEY HQ/F SULZMAN 59-Life Sci, NEC

NAGW 3859 Marshall University 8582
INTERACTION OF LIGHT AND ETHYLENE
Period *Obligations*
01/21/1994-12/31/1995 FY94: \$43,785 TOTAL: \$43,785
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M HARRISON HQ/T W HALSTEAD 51-Biological Sci

NAG 1-1381 West Virginia University 8583
NOTCH EFFECTS IN 2D BRAIDED TEXTILE NEW GRANT
Period *Obligations*
01/24/1992-12/31/1994 FY94: \$49,689 TOTAL: \$143,004
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T L NORMAN LARC/C C POE 47-Materials Engr
LARC/W C JACKSON

NAG 1-1584 West Virginia University 8584
NASP PROPULSION AIRFRAME INTEGRATION FOR SUBSONIC AFT BODY DRAG ALLEVIATION
Period *Obligations*
12/21/1993-12/31/1994 FY94: \$191,000 TOTAL: \$191,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J L LOTH LARC/D E REUBUSH 41-Aero Engr
G J MORRIS LARC/B L BERRIER
R E WALTERS

NAG 1-1635 West Virginia University 8585
THE ROLE OF TURBULENT MIXING IN THE CHEMISTRY AND DISPERSION OF THE WAKE OF SUBSONIC AIRCRAFT
Period *Obligations*
07/26/1994-06/30/1995 FY94: \$30,532 TOTAL: \$30,532
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W S LEWELLEN LARC/W GROSE 31-Atmos Sci

NAG 2-590 West Virginia University 8586
MUSCLE INJURY AND REPAIR IN ZERO GRAVITY - COSMOS 89
Period *Obligations*
07/20/1989-12/31/1993 FY94: \$0 TOTAL: \$249,098
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W T STAUBER ARC/R E GRINDELAND 56-Medical Sciences

NASA'S UNIVERSITY PROGRAM WEST VIRGINIA (Continued)

NAG 5-2129	West Virginia University		8587
	A COLLABORATIVE AND CONCURRENT ENVIRONMENT FOR IV AND V		
	<i>Period</i>	<i>Obligations</i>	
	11/09/1992-11/14/1994	FY94: \$550,000	TOTAL: \$1,052,734
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	J T JUREWICZ	GSFC/J GITELMAN	22-Computer Science
	J R CALLAHAN		
	H H AMMAR		
NAG 8-149	West Virginia University		8588
	NASA JOVE INITIATIVE		
	<i>Period</i>	<i>Obligations</i>	
	03/01/1990-06/14/1994	FY94: \$0	TOTAL: \$91,668
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	R N ELI	MSFC/C R CHAPPELL	31-Atmos Sci
	M J LYELL	MSFC/N F SIX	
NAGW 2810	West Virginia University		8589
	THE INDEPENDENT SOFTWARE VALIDATION AND VERIFICATION FACILITY		
	<i>Period</i>	<i>Obligations</i>	
	12/20/1991-05/31/1994	FY94: \$29,813	TOTAL: \$12,436,813
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	W REEVES	HQ/D BAYON	49-Engr, NEC
NCC 2-759	West Virginia University		8590
	DETERMINATION OF STABILITY AND CONTROL DERIVATIVES OF THE F/A-18 HARV FROM FLIGHT DATA USING THE.....		
	<i>Period</i>	<i>Obligations</i>	
	05/20/1992-12/31/1995	FY94: \$97,090	TOTAL: \$167,977
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	M R NAPOLITANO	ARC/A H BOWERS	41-Aero Engr
	J M SPAGNUOLO		
NCCW 51	West Virginia University		8591
	LOW COST IN SITU CORRELATIVE MEASUREMENT PROJECT		
	<i>Period</i>	<i>Obligations</i>	
	06/14/1994-05/31/1996	FY94: \$1,000,000	TOTAL: \$1,000,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	R E WALTER	HQ/K NIEWOEHNER	31-Atmos Sci
NGT 00-030-193	West Virginia University		8592
	NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	08/26/1993-08/31/1994	FY94: \$0	TOTAL: \$22,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	T WARNER	HQ/G ASRAR	31-Atmos Sci
		HQ/D M BUTLER	
NGT 00-040-047	West Virginia University		8593
	NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	07/24/1991-02/28/1995	FY94: \$170,000	TOTAL: \$663,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	J T JUREWICZ	HQ/E T SCHWARTZ	99-Multi-Discip
NGT 00-050-671	West Virginia University		8594
	NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	09/21/1990-06/30/1993	FY94: \$0	TOTAL: \$66,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S N DWIVEDI	HQ/F C OWENS	45-Elec Engr
NGT 00-050-687	West Virginia University		8595
	NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	10/19/1990-06/30/1993	FY94: \$0	TOTAL: \$66,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S DWIVEDI	HQ/F C OWENS	46-Mech Engr
NGT 00-050-697	West Virginia University		8596
	NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	04/30/1991-06/30/1995	FY94: \$17,000	TOTAL: \$83,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S N DWIVEDI	HQ/F C OWENS	46-Mech Engr
NGT 00-050-752	West Virginia University		8597
	NASA GRADUATE STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	07/02/1991-06/30/1994	FY94: \$0	TOTAL: \$66,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S N DWIVEDI	HQ/F C OWENS	46-Mech Engr
NGT 00-051-098	West Virginia University		8598
	GRADUATE STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	06/01/1993-06/30/1996	FY94: \$22,000	TOTAL: \$44,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S N DWIVEDI	KSC/B MARTIN	46-Mech Engr
NGT 00-051-200	West Virginia University		8599
	GRAD STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	04/25/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	D LYONS	MSFC/F SIX	46-Mech Engr
NGT 00-051-370	West Virginia University		8600
	GRADUATE STUDENT RESEARCHERS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	08/08/1994-08/31/1997	FY94: \$22,000	TOTAL: \$22,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	J G WELLS	LARC/L EVANS	99-Multi-Discip
NGT 00-070-255	West Virginia University		8601
	NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED MINORITY FOCUS PROGRAM		
	<i>Period</i>	<i>Obligations</i>	
	05/04/1992-06/30/1995	FY94: \$22,000	TOTAL: \$66,000
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	S N DWIVEDI	MSFC/F SIX	46-Mech Engr
NCC 5-71	West Virginia Weysleyan College		8602
	SPECTROSCOPIC INVESTIGATIONS ON THE FORMATION, COMPOSITION, AND PROPERTIES OF PRE-SOLAR DUST GAINS		
	<i>Period</i>	<i>Obligations</i>	
	06/01/1994-07/14/1994	FY94: \$8,300	TOTAL: \$8,300
	<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
	P A WITHEY	GSFC/J A NUTH	11-Astronomy
		GSFC/J E ALLEN	

NASA'S UNIVERSITY PROGRAM WEST VIRGINIA (Continued)

NAGW 2486 **Wheeling Jesuit College** **8603**
DESIGN AND CONSTRUCTION MANAGEMENT SERVICES FOR THE
CLASSROOM OF THE FUTURE PROJECT
Period *Obligations*
04/25/1991-04/23/1994 FY94: \$0 TOTAL: \$10,000,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T ACKER HQ/F DURSO 99-Multi-Discip

NAG 5-2199 **Marquette University** **8611**
PARALLEL DECOMPOSITION OPTIMIZATION ALGORITHMS FOR
LARGE-SCALE NEURAL NETWORK IMPLEMENTATION ...
Period *Obligations*
02/18/1993-11/30/1994 FY94: \$30,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
X FENG GSFC/J R FISCHER 22-Computer Science

NAGW 3110 **Wheeling Jesuit College** **8604**
CONSTRUCTION OF FACILITIES FOR THE NATL TECHNOLOGY
TRANSFER CENTER
Period *Obligations*
06/21/1992-05/31/1995 FY94: \$9,774,000 TOTAL: \$10,524,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
T S ACKER HQ/F X DURSO 99-Multi-Discip

NAG 8-237 **Marquette University** **8612**
THERMAL ANALYSIS OF LDEF
Period *Obligations*
06/05/1992-11/05/1993 FY94: \$0 TOTAL: \$18,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W E BROWER MSFC/A F WHITAKER 47-Materials Engr
MSFC/M M FINCKENOR

NCC 5-107 **Wheeling Jesuit College** **8605**
EXPLORING THE ENVIRONMENT
Period *Obligations*
09/22/1994-09/21/1997 FY94: \$60,000 TOTAL: \$60,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R MYERS GSFC/A F HASLER 99-Multi-Discip

NAG 8-256 **Marquette University** **8613**
JOVE
Period *Obligations*
12/02/1992-05/31/1995 FY94: \$19,000 TOTAL: \$78,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J RICHIE MSFC/F SIX 99-Multi-Discip
K AKBAY

NCCW 12 **Wheeling Jesuit College** **8606**
CLASSROOM OF THE FUTURE
Period *Obligations*
02/13/1991-12/31/1994 FY94: \$72,591 TOTAL: \$5,211,841
Prin. Invest. *NASA Tech. Officer* *CASE Category*
C D MILLER HQ/M V PHELPS 99-Multi-Discip

NAG 8-875 **Marquette University** **8614**
STUDY - PARTIAL PRESSURES THERMAL DYNAMICS AND PHASED
DIAGRAM STUDIES FOR 11-V1 SYSTEMS
Period *Obligations*
05/10/1991-08/31/1994 FY94: \$0 TOTAL: \$70,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R F BREBRICK MSFC/S L LEHOCZKY 19-Phys Sci, NEC
MSFC/D A WATRING

NCCW 14 **Wheeling Jesuit College** **8607**
THE DEVELOPMENT, DEMONSTRATION AND IMPLEMENTATION OF
NATIONAL TECHNOLOGY TRANSFER CENTER
Period *Obligations*
04/24/1991-04/23/1995 FY94: \$9,478,024 TOTAL: \$26,646,429
Prin. Invest. *NASA Tech. Officer* *CASE Category*
L W RIVERS HQ/J ROOT 99-Multi-Discip

NAS 9-18768 **Marquette University** **8615**
LETTER CONTRACT FOR LIFE SCI EXP: 'THE EFFECTS OF
WEIGHTLESSNESS ON HUMAN SINGLE MUSCLE FIBER'
Period *Obligations*
08/31/1992-04/01/1997 FY94: \$175,000 TOTAL: \$384,995
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H FITTS JSC/V ELLERBEE 59-Life Sci, NEC

WISCONSIN

NAG 5-1620 **Beloit College** **8608**
SUPPORT OF HST AND GTO OBSERVATORIES
Period *Obligations*
05/28/1991-10/31/1994 FY94: \$80,655 TOTAL: \$281,865
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D J SCHROEDER GSFC/S SOBIESKI 11-Astronomy

NAG 2-552 **Medical College of Wisconsin** **8616**
ELECTRON MICROSCOPY, ELECTROMYOGRAPHY, HISTOCHEMIS-
TRY, AND BIOCHEMISTRY OF RAT HINDLIMB MUSCLES
Period *Obligations*
12/01/1988-09/30/1994 FY94: \$246,524 TOTAL: \$1,152,544
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A RILEY ARC/A D MANDEL 51-Biological Sci

NAG 2-212 **Marquette University** **8609**
ALTERATIONS IN SKELETAL MUSCLE WITH DISUSE ATROPHY
Period *Obligations*
11/01/1982-01/31/1995 FY94: \$58,200 TOTAL: \$686,370
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H FITTS ARC/S B ARNAUD 51-Biological Sci
B R UNSWORTH
J B COURTRIGHT

NAG 2-633 **Medical College of Wisconsin** **8617**
MORPHOLOGICAL, HISTOCHEMICAL, IMMUNOCYTOCHEMICAL, AND
ELECTROMYOGRAPHIC INVESTIGATIONS OF SPACE- ...
Period *Obligations*
04/27/1990-12/31/1994 FY94: \$124,798 TOTAL: \$352,624
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D A RILEY ARC/C M WINGET 51-Biological Sci
S ELLIS
A L HAAS

NAG 2-636 **Marquette University** **8610**
THE EFFECT OF WEIGHTLESSNESS ON SINGLE MUSCLE FIBER
FUNCTION IN RHESUS MONKEYS
Period *Obligations*
05/17/1990-07/14/1995 FY94: \$180,000 TOTAL: \$540,059
Prin. Invest. *NASA Tech. Officer* *CASE Category*
R H FITTS ARC/C M WINGET 56-Medical Sciences

NAG 1-1457 **University of Wisconsin - La Crosse** **8618**
COSMIC RADIATION
Period *Obligations*
09/30/1992-08/31/1993 FY94: \$0 TOTAL: \$30,549
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J W NORBURY LARC/F A CUCINOTTA 13-Physics
LARC/E J CONWAY

**NASA'S UNIVERSITY PROGRAM
WISCONSIN (Continued)**

NAG 1-553		University of Wisconsin - Madison		8619
A CONTINENTAL MIDDLE AND HIGH CLOUD PROJECT FOR FIRE				
<i>Period</i>		<i>Obligations</i>		
01/02/1985-01/31/1995	FY94: \$68,709	TOTAL: \$715,524		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
V E SUOMI	LARC/T OWENS	31-Atmos Sci		
D P WYLIE	LARC/T L OWENS			

NAG 1-882		University of Wisconsin - Madison		8620
ANALYZE HIGH SPECTRAL RESOLUTION LIDAR DATA ACQUIRED DURING THE FIRE CIRRHUS EXPERIMENT				
<i>Period</i>		<i>Obligations</i>		
05/06/1988-12/31/1994	FY94: \$68,000	TOTAL: \$616,501		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
E W ELORANTA	LARC/T OWENS	31-Atmos Sci		
	LARC/H S WAGNER			

NAG 1-1177		University of Wisconsin - Madison		8621
PARTICIPATION IN THE FIRE PHASE II PROGRAM				
<i>Period</i>		<i>Obligations</i>		
09/10/1990-11/30/1994	FY94: \$25,000	TOTAL: \$389,995		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
W L SMITH	LARC/D S MCDUGAL	31-Atmos Sci		
S A ACKERMAN	LARC/T L OWENS			

NAG 1-1403		University of Wisconsin - Madison		8622
DYNAMICAL AND CHEMICAL STUDIES OF AIRCRAFT EMISSIONS USING SATELLITE DATA AND A 2-D MODEL				
<i>Period</i>		<i>Obligations</i>		
03/04/1992-02/28/1995	FY94: \$49,971	TOTAL: \$140,596		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
M H HITCHMAN	LARC/D E SISKIND	31-Atmos Sci		

NAG 1-1568		University of Wisconsin - Madison		8623
RESEARCH ON THE DESIGN AND CONSTRUCTION OF ULTRA HIGH SPEED, LLANAR, MAGNETIC MICROMOTORS				
<i>Period</i>		<i>Obligations</i>		
01/05/1994-01/04/1995	FY94: \$50,000	TOTAL: \$50,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
H GUCKEL	LARC/N J GROOM	49-Engr. NEC		

NAG 2-568		University of Wisconsin - Madison		8624
SOFT DENSE FIBROUS CONNECTIVE TISSUE RESPONSE TO HINDLIMB SUSPENSION				
<i>Period</i>		<i>Obligations</i>		
03/15/1989-04/30/1994	FY94: \$0	TOTAL: \$403,029		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
A C VAILAS	ARC/R E GRINDELAND	56-Medical Sciences		

NAG 2-671		University of Wisconsin - Madison		8625
EFFECTS OF HINDLIMB SUSPENSION ON SKELETAL MUSCLE GROWTH				
<i>Period</i>		<i>Obligations</i>		
08/30/1990-12/31/1993	FY94: \$0	TOTAL: \$202,845		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
E SCHULTZ	ARC/E M HOLTON	51-Biological Sci		

NAG 2-769		University of Wisconsin - Madison		8626
RHESUS MONKEY BIOMARKERS				
<i>Period</i>		<i>Obligations</i>		
03/26/1992-12/31/1994	FY94: \$50,000	TOTAL: \$139,515		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
A C VAILAS	ARC/R BALLARD	51-Biological Sci		
J HEINER				

NAG 2-838		University of Wisconsin - Madison		8627
GROWTH OF POTATOES FOR CELSS				
<i>Period</i>		<i>Obligations</i>		
05/24/1993-06/30/1994	FY94: \$0	TOTAL: \$100,115		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
TIBBITTS	ARC/R D MACELROY	55-Agriculture Sci		
	ARC/M KLISS			

NAG 2-859		University of Wisconsin - Madison		8628
THE O/H, S/H, AND TE DISTRIBUTIONS IN THE GALACTIC P LANE				
<i>Period</i>		<i>Obligations</i>		
09/23/1993-09/30/1994	FY94: \$9,300	TOTAL: \$39,300		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
E B CHURCHWELL	ARC/C D LAUGHLIN	11-Astronomy		
J S MATHIS	ARC/C M GILLESPIE JR.			

NAG 3-1087		University of Wisconsin - Madison		8629
3-D MOD OF DIESEL SPRAY COMB AND EMISSIONS				
<i>Period</i>		<i>Obligations</i>		
10/27/1989-09/30/1994	FY94: \$0	TOTAL: \$953,010		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
R D REITZ	LERC/H L NGUYEN	22-Computer Science		
	LERC/W T WINTUCKY			

NAG 3-1209		University of Wisconsin - Madison		8630
PENDANT ANTI-OXIDANTS FOR HIGH PERFORMANCE MATRIX RESINS				
<i>Period</i>		<i>Obligations</i>		
10/01/1990-10/31/1993	FY94: \$0	TOTAL: \$52,258		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
J P DROSKE	LERC/W B ALSTON	12-Chemistry		

NAG 3-1393		University of Wisconsin - Madison		8631
THERMOCAPILLARY CONVECTION IN FLOATING ZONES UNDER SIMULATED REDUCED-GRAVITY CONDITIONS				
<i>Period</i>		<i>Obligations</i>		
12/17/1992-11/30/1994	FY94: \$91,740	TOTAL: \$199,290		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
S KOU	LERC/J A SALZMAN	13-Physics		
	LERC/R L THOMPSON			

NAG 3-1447		University of Wisconsin - Madison		8632
FEASIBILITY STUDY OF BATTERY STARTING OF A 3 PHASE 400 HZ INDUCTION GEN VIA A 20 KHZ HF RES AC LINK				
<i>Period</i>		<i>Obligations</i>		
03/09/1993-10/31/1994	FY94: \$47,330	TOTAL: \$75,540		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
T A LIPO	LERC/L M TAYLOR	45-Elec Engr		
	LERC/D D RENZ			

NAG 5-81		University of Wisconsin - Madison		8633
RESOLUTION STUDIES AND ENERGY DIAGNOSTICS OF GLOBAL DATA DN CLIMATE MODEL SIMULATION				
<i>Period</i>		<i>Obligations</i>		
06/15/1980-02/28/1995	FY94: \$150,000	TOTAL: \$1,699,380		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
D R JOHNSON	GSFC/R M ATLAS	31-Atmos Sci		

NAG 5-594		University of Wisconsin - Madison		8634
INVESTIGATION OF SINGLE PHOTON CALORIMETERS FOR X-RAY SPECTROSCOPY				
<i>Period</i>		<i>Obligations</i>		
08/01/1985-09/30/1994	FY94: \$50,000	TOTAL: \$869,000		
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>		
D MCCAMMON	GSFC/R KELLEY	13-Physics		
H GUCKEL				
M JUDA				

**NASA'S UNIVERSITY PROGRAM
WISCONSIN (Continued)**

NAG 5-647 University of Wisconsin - Madison 8635
DEVELOPMENT AND FLIGHT OF WIDE FIELD IMAGING SURVEY
POLARMETER
Period *Obligations*
03/01/1988-12/31/1994 FY94: \$524,224 TOTAL: \$1,759,090
Prin. Invest. *NASA Tech. Officer*
K H NORDSIECK GSFC/L J EARLY CASE Category
GSFC/R H PLESS 13-Physics

NAG 5-674 University of Wisconsin - Madison 8636
SPARTIAL HETERODYNE SPECTROMETER FOR INVESTIGATION OF
INTERSTELLAR FAR ULTRAVIOLET EMISSION LINES
Period *Obligations*
11/30/1990-01/31/1995 FY94: \$310,000 TOTAL: \$744,999
Prin. Invest. *NASA Tech. Officer*
R J REYNOLDS GSFC/L J EARLY CASE Category
GSFC/R H PLESS 13-Physics

NAG 5-679 University of Wisconsin - Madison 8637
COSMIC X-RAY PHYSICS
Period *Obligations*
03/25/1991-04/30/1995 FY94: \$347,000 TOTAL: \$1,368,871
Prin. Invest. *NASA Tech. Officer*
D MCCAMMON GSFC/L J EARLY CASE Category
GSFC/R H PLESS 13-Physics

NAG 5-832 University of Wisconsin - Madison 8638
A STUDY OF THE LANDOMENTAL CHARACTERISTICS OF
INTERSTELLA MATTER
Period *Obligations*
08/15/1986-01/31/1995 FY94: \$15,566 TOTAL: \$119,496
Prin. Invest. *NASA Tech. Officer*
J A CARDELLI GSFC/Y KONDO CASE Category
E W BRUGEL 11-Astronomy

NAG 5-1330 University of Wisconsin - Madison 8639
SATELLITE AND ASSEMBLATED DATA ANALYSIS OF CLIMATE
Period *Obligations*
02/05/1990-10/31/1995 FY94: \$129,000 TOTAL: \$513,140
Prin. Invest. *NASA Tech. Officer*
D R JOHNSON GSFC/A ARKING CASE Category
39-Env Sci, NEC

NAG 5-1416 University of Wisconsin - Madison 8640
MODELING ENERGY AND MASS FLUXES PRAIRIE CANOPIES
Period *Obligations*
08/14/1990-08/31/1995 FY94: \$75,000 TOTAL: \$217,350
Prin. Invest. *NASA Tech. Officer*
J M NORMAN GSFC/F G HALL CASE Category
31-Atmos Sci

NAG 5-1463 University of Wisconsin - Madison 8641
DUST IN THE SMALL MAGELLANIC CLOUD
Period *Obligations*
09/12/1990-10/14/1994 FY94: \$0 TOTAL: \$21,797
Prin. Invest. *NASA Tech. Officer*
K H NORDSIECK GSFC/D WEST CASE Category
11-Astronomy

NAG 5-1586 University of Wisconsin - Madison 8642
A FACILITY TEAM MEMBER FOR A TROPICAL RAINFALL AND
ENERGY ANALYSIS EXPERIMENT
Period *Obligations*
05/13/1991-05/31/1995 FY94: \$106,000 TOTAL: \$321,500
Prin. Invest. *NASA Tech. Officer*
V E SUOMI GSFC/R ADLER CASE Category
31-Atmos Sci

NAG 5-1609 University of Wisconsin - Madison 8643
VENUS IN MOTION: AN ANIMATED VIDEO CATALOG
Period *Obligations*
05/22/1991-06/14/1993 FY94: \$0 TOTAL: \$80,734
Prin. Invest. *NASA Tech. Officer*
S S LIMAYE GSFC/L D TRAVIS CASE Category
31-Atmos Sci

NAG 5-1613 University of Wisconsin - Madison 8644
GTO - HIGH SPEED PHOTOMETER
Period *Obligations*
05/23/1991-10/31/1994 FY94: \$1,341,570 TOTAL: \$4,242,670
Prin. Invest. *NASA Tech. Officer*
R C BLESS GSFC/S SOBIESKI CASE Category
11-Astronomy

NAG 5-1659 University of Wisconsin - Madison 8645
PRECIPITATION RETRIEVALS FROM PASSIVE MICROWAVE SA
TELLITE OBSERVATIONS
Period *Obligations*
10/15/1991-10/14/1993 FY94: \$0 TOTAL: \$60,706
Prin. Invest. *NASA Tech. Officer*
W S OLSON GSFC/C KUMMEROW CASE Category
31-Atmos Sci

NAG 5-1683 University of Wisconsin - Madison 8646
A SEARCH FOR X-RAY EMISSIONS FROM B SUPERGIANTS
Period *Obligations*
07/15/1991-01/14/1994 FY94: \$0 TOTAL: \$57,477
Prin. Invest. *NASA Tech. Officer*
J P CASSINELLI GSFC/R PETRE CASE Category
11-Astronomy

NAG 5-1726 University of Wisconsin - Madison 8647
A STUDY OF GALACTIC DIFFUSE X-RAY BACKGROUNDS
Period *Obligations*
08/01/1991-07/31/1993 FY94: \$0 TOTAL: \$17,500
Prin. Invest. *NASA Tech. Officer*
W T SANDERS GSFC/R PETRE CASE Category
11-Astronomy

NAG 5-1740 University of Wisconsin - Madison 8648
IUE OBSERVATIONS OF SELECTED HOT STARS COORDINATED WITH
WUPPE
Period *Obligations*
08/15/1991-08/31/1993 FY94: \$0 TOTAL: \$14,300
Prin. Invest. *NASA Tech. Officer*
K S BJORKMAN GSFC/D WEST CASE Category
11-Astronomy

NAG 5-1806 University of Wisconsin - Madison 8649
THE DENSITY AND KINEMATICAL STRUCTURE OF THE GALAC TIC
HALO
Period *Obligations*
11/01/1991-10/31/1993 FY94: \$0 TOTAL: \$19,998
Prin. Invest. *NASA Tech. Officer*
B SAVAGE GSFC/D WEST CASE Category
11-Astronomy

NAG 5-1817 University of Wisconsin - Madison 8650
DERIVATION OF THE SOFT X-RAY DIFFUSE BACKGROUND DI
STRIBUTION FROM THE ROSAT ALL-SKY SURVEY
Period *Obligations*
09/30/1991-09/30/1993 FY94: \$0 TOTAL: \$204,413
Prin. Invest. *NASA Tech. Officer*
D MCCAMMON GSFC/R PETRE CASE Category
11-Astronomy

**NASA'S UNIVERSITY PROGRAM
WISCONSIN (Continued)**

NAG 5-1841 University of Wisconsin - Madison 8651			
X-RAY EMISSION FROM O-STARS			
<i>Period</i>	<i>Obligations</i>		
12/02/1991-06/14/1995	FY94: \$29,999	TOTAL: \$46,834	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J P CASSINELLI	GSFC/R PETRE	11-Astronomy	
NAG 5-2170 University of Wisconsin - Madison 8659			
RECENTLY DISCOVERED YOUNG PULSARS: CANDIDATE COOL ING NEUTRON STARS AND A POSSIBLE 2.78 HOUR			
<i>Period</i>	<i>Obligations</i>		
12/31/1992-12/31/1993	FY94: \$0	TOTAL: \$25,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J P FINLEY	GSFC/D WEST	11-Astronomy	
NAG 5-1852 University of Wisconsin - Madison 8652			
GODDARD HIGH RESOLUTION SPECTROGRAPH			
<i>Period</i>	<i>Obligations</i>		
12/17/1991-10/31/1994	FY94: \$159,000	TOTAL: \$554,190	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B D SAVAGE	GSFC/A SMITH	11-Astronomy	
NAG 5-2282 University of Wisconsin - Madison 8660			
EUV SPECTRAL LINE EMISSION FROM EARLY B STARS AND STUDY OF EUV LINE EMISSION FROM BE STARS			
<i>Period</i>	<i>Obligations</i>		
05/26/1993-06/14/1995	FY94: \$37,494	TOTAL: \$129,043	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J P CASSINELLI	GSFC/D WEST	11-Astronomy	
NAG 5-1893 University of Wisconsin - Madison 8653			
MONITORING THE RECOVERY OF PSR 0540-69 AFTER ITS G IANT GLITCH			
<i>Period</i>	<i>Obligations</i>		
02/10/1992-08/14/1995	FY94: \$40,000	TOTAL: \$54,110	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H B OGELMAN	GSFC/R PETRE	11-Astronomy	
NAG 5-2534 University of Wisconsin - Madison 8661			
DYNAMICS OF CLUSTERS OF GALAXIES			
<i>Period</i>	<i>Obligations</i>		
02/21/1994-03/14/1995	FY94: \$4,929	TOTAL: \$4,929	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J G HOESSEL	GSFC/R PETRE	11-Astronomy	
NAG 5-1894 University of Wisconsin - Madison 8654			
SOFT X-RAY SHADOWS OF CLOUDS NEAR THE URSA MAJOR N EUTRAL HYDROGEN			
<i>Period</i>	<i>Obligations</i>		
02/10/1992-02/14/1994	FY94: \$0	TOTAL: \$69,921	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W T SANDERS	GSFC/R PETRE	11-Astronomy	
NAG 5-2557 University of Wisconsin - Madison 8662			
HARD TAILS OF COOLING NEUTRON STARS			
<i>Period</i>	<i>Obligations</i>		
03/14/1994-03/31/1995	FY94: \$25,000	TOTAL: \$25,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H B OGELMAN	GSFC/N WHITE	11-Astronomy	
NAG 5-2034 University of Wisconsin - Madison 8655			
THEORIES OF NON-CATASTROPHIC GAMMA-RAY BURSTS AND TRANSIENTS			
<i>Period</i>	<i>Obligations</i>		
07/17/1992-07/31/1994	FY94: \$0	TOTAL: \$40,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W KLUZNIAK	GSFC/J P NORRIS GSFC/N WHITE	11-Astronomy	
NAG 5-2601 University of Wisconsin - Madison 8663			
MEASUREMENT AND SCALING OF CARBON BUDGETS FOR CONT RASTING BOREAL FOREST SITES			
<i>Period</i>	<i>Obligations</i>		
07/19/1994-05/31/1995	FY94: \$315,461	TOTAL: \$315,461	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
S T GOWER	GSFC/F G HALL GSFC/P J SELLERS	39-Env Sci, NEC	
NAG 5-2035 University of Wisconsin - Madison 8656			
SEARCH FOR TRANSIENT EMISSIONS ABOVE 30 MEV			
<i>Period</i>	<i>Obligations</i>		
07/17/1992-07/31/1994	FY94: \$0	TOTAL: \$5,760	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W F FRY	GSFC/J P NORRIS GSFC/N WHITE	11-Astronomy	
NAG 5-2602 University of Wisconsin - Madison 8664			
AG DRACONIS, THE BRIGHTEST, VERY SOFT X-RAY SOURCE SYMBIOTIC STAR			
<i>Period</i>	<i>Obligations</i>		
05/26/1994-05/31/1995	FY94: \$26,766	TOTAL: \$26,766	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C M ANDERSON	GSFC/R J OLIVERSEN	11-Astronomy	
NAG 5-2066 University of Wisconsin - Madison 8657			
EXPLORING THE HOT GALACTIC HALO USING SHADOWS OF H IGH LATITUDE CLOUDS			
<i>Period</i>	<i>Obligations</i>		
08/05/1992-08/14/1995	FY94: \$0	TOTAL: \$20,999	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
M JUDA	GSFC/R PETRE	11-Astronomy	
NAG 5-2650 University of Wisconsin - Madison 8665			
THE ENCOUNTER OF P.SHOEMAKER - LEVY 9 WITH THE JOV IAN PLASMA TORUS AND EXTENDED SODIUM CLOUD			
<i>Period</i>	<i>Obligations</i>		
07/05/1994-07/14/1995	FY94: \$6,510	TOTAL: \$6,510	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
F SCHERB	GSFC/R J OLIVERSEN	11-Astronomy	
NAG 5-2169 University of Wisconsin - Madison 8658			
A STUDY OF UV INTERSTELLAR EXTINCTION ALONG SIGHT LINES SAMPLES BY WUPPE			
<i>Period</i>	<i>Obligations</i>		
12/31/1992-12/31/1994	FY94: \$0	TOTAL: \$6,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C M ANDERSON	GSFC/D WEST	11-Astronomy	
NAG 5-2691 University of Wisconsin - Madison 8666			
ORIGIN OF THE GALACTIC DISK 6.7 KEV LINE EMISSION			
<i>Period</i>	<i>Obligations</i>		
08/16/1994-02/29/1996	FY94: \$18,000	TOTAL: \$18,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E CHURCHWELL	GSFC/N WHITE	11-Astronomy	

NASA'S UNIVERSITY PROGRAM **WISCONSIN (Continued)**

NAG 5-2694 University of Wisconsin - Madison 8667
 COMPRESSION AND PROGRESSIVE TRANSMISSION OF DIGITAL IMAGES
Period *Obligations*
 08/24/1994-08/31/1995 FY94: \$40,000 TOTAL: \$40,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J W PERCIVAL GSFC/N LAL 39-Env Sci, NEC

NAG 5-2705 University of Wisconsin - Madison 8668
 ANOMALOUS X-RAY EMISSION FROM TAU SCO TYPE B STARS
Period *Obligations*
 08/24/1994-08/29/1996 FY94: \$18,000 TOTAL: \$18,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J CASSINELLI GSFC/N WHITE 11-Astronomy

NAG 5-2720 University of Wisconsin - Madison 8669
 CONTINUING INVESTIGATION OF SINGLE-PHOTON CALORI- METERS FOR X-RAY SPECTROSCOPY
Period *Obligations*
 09/08/1994-09/30/1996 FY94: \$120,000 TOTAL: \$120,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D MCCAMMON GSFC/R L KELLEY 11-Astronomy

NAG 8-153 University of Wisconsin - Madison 8670
 MICROMECHANICAL CHARACTERIZATION OF METAL NITRIDE FILMS AT AMBIENT ELEVATED AND CRYOGENIC TEMPERATURE
Period *Obligations*
 03/20/1990-06/25/1994 FY94: \$0 TOTAL: \$171,220
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D S STONE MSFC/R L THOM 47-Materials Engr
 MSFC/M A BAKER

NAG 8-771 University of Wisconsin - Madison 8671
 CONTAINERLESS PROCESSING OF UNDERCOOLED MELTS.
Period *Obligations*
 03/01/1989-02/28/1993 FY94: TOTAL: \$479,599
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J H PEREPEZKO MSFC/M B ROBINSON 47-Materials Engr

NAG 8-828 University of Wisconsin - Madison 8672
 INTERACTIVE ACCESS AND MGMT FOR FOUR-DIMENSIONAL ENVIRONMENTAL DATA SETS USING MCIDAS
Period *Obligations*
 05/23/1990-09/30/1994 FY94: \$0 TOTAL: \$549,963
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W L HIBBARD MSFC/P J MEYER 31-Atmos Sci
 G J TRIPOLI

NAG 8-927 University of Wisconsin - Madison 8673
 ATMOSPHERIC SOUDING
Period *Obligations*
 07/28/1992-07/31/1994 FY94: \$65,000 TOTAL: \$130,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G DRAK MSFC/F R ROBERTSON 31-Atmos Sci

NAG 8-974 University of Wisconsin - Madison 8674
 ART AUTOMATED SYSTEM FOR THE PRODUCTION OF CLOUD/ WATER VAPOR MOTION WINDS FROM GEOSTATIONARY SATEL
Period *Obligations*
 06/16/1993-06/30/1993 FY94: \$0 TOTAL: \$100,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 V E SUOMI MSFC/G J JEDLOVEC 32-Geological Sci

NAG 8-1023 University of Wisconsin - Madison 8675
 MECHANICAL PROPERTIES OF METAL NITRIDE FILMS AT AMBIENT, ELEVATED AND CRYOGENIC TEMPERATURES
Period *Obligations*
 03/23/1994-03/22/1996 FY94: \$68,979 TOTAL: \$68,979
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 D S STONE MSFC/L E MOORE 47-Materials Engr
 K B YODER MSFC/R L THOM

NAG 8-1068 University of Wisconsin - Madison 8676
 CONTAINERLESS PROCESSING OF COMPOSITE MATERIALS
Period *Obligations*
 07/14/1994-07/13/1995 FY94: \$49,618 TOTAL: \$49,618
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J PEREPEZKO MSFC/M B ROBINSON 19-Phys Sci, NEC
 MSFC/B SCHRICK

NAG 9-568 University of Wisconsin - Madison 8677
 ASSESS METHODS TO OBTAIN A DIRECT MEASUREMENT OF HELIUM 3 ON LUNAR SURFACE BY REMOTE CONTROL
Period *Obligations*
 11/05/1991-04/01/1993 FY94: \$0 TOTAL: \$30,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 G L KULCINSKI JSC/D MCKAY 13-Physics

NAG 9-615 University of Wisconsin - Madison 8678
 LUNAR MISSION FOR VOLATILE GAS RECOVERY
Period *Obligations*
 06/12/1992-10/01/1993 FY94: \$0 TOTAL: \$149,701
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 N A DUFFIE JSC/D S MCKAY 59-Life Sci, NEC
 G L KULCINSKI

NAGW 422 University of Wisconsin - Madison 8679
 STUDIES OF ULTRAVIOLET INTRINSIC POTARIZATION OF STARS
Period *Obligations*
 03/01/1983-02/28/1995 FY94: \$0 TOTAL: \$362,891
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 V CASSINELLA HQ/G C CLAYTON 11-Astronomy
 HQ/E J WEILER

NAGW 975 University of Wisconsin - Madison 8680
 COMMERCIAL DEVELOPMENT OF SPACE
Period *Obligations*
 09/01/1986-10/31/1995 FY94: \$840,000 TOTAL: \$9,754,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J G BOLLINGER HQ/V CEVENINI 51-Biological Sci
 N DUFFIE HQ/A VILLAMIL

NAGW 1745 University of Wisconsin - Madison 8681
 STUDYING THE IMPACT OF COLD-GRONTAL PASSAGES
Period *Obligations*
 06/30/1989-09/30/1992 FY94: \$0 TOTAL: \$350,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 W P MENZEL HQ/J C DODGE 31-Atmos Sci
 H H ROBERTS HQ/A TUYAHOV

NAGW 1768 University of Wisconsin - Madison 8682
 THEORETICAL STUDIES OF INTERSTELLAR DUST
Period *Obligations*
 05/26/1989-05/31/1994 FY94: \$0 TOTAL: \$145,988
Prin. Invest. *NASA Tech. Officer* *CASE Category*
 J S MATHIS HQ/G C CLAYTON 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
WISCONSIN (Continued)**

NAGW 1773 University of Wisconsin - Madison 8683			
SEARCH FOR ICE SHEET ELEVATION CHANGES IN EAST ANTARCTICA			
<i>Period</i>	<i>Obligations</i>		
07/19/1989-04/30/1994	FY94: \$0	TOTAL: \$354,415	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C R BENTLEY	HQ/R H THOMAS	33-Oceanography	
	HQ/W S WILSON		
NAGW 1858 University of Wisconsin - Madison 8684			
AN INVESTIGATION OF CURRENT AND FUTURE SATELLITE AND IN SITU			
<i>Period</i>	<i>Obligations</i>		
10/04/1989-01/31/1994	FY94: \$0	TOTAL: \$396,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G R DIAK	HQ/R A SCHIFFER	31-Atmos Sci	
	HQ/J S THEON		
NAGW 2053 University of Wisconsin - Madison 8685			
NAGW-2053/UNIV OF WISCONSIN /u MADISON/TRACE GAS RETRIEVAL PROGRAM			
<i>Period</i>	<i>Obligations</i>		
05/01/1990-02/28/1994	FY94: \$0	TOTAL: \$507,273	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W L SMITH	HQ/J C DODGE	31-Atmos Sci	
	HQ/A J TUYAHOV		
NAGW 2099 University of Wisconsin - Madison 8686			
STATISTICAL ANALYSIS OF STRATOSPHERIC TEMPERATURE AND OZONE PROFILE DATA FOR TRENDS AND MODEL COMP.			
<i>Period</i>	<i>Obligations</i>		
05/07/1990-11/15/1993	FY94: \$0	TOTAL: \$147,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
G C REINSEL	HQ/R D MCPETERS	31-Atmos Sci	
	HQ/M J PRATHER		
NAGW 2210 University of Wisconsin - Madison 8687			
EFFECTS AND DIAGNOSTICS OF SHOCKS IN HOT STAR WIND S			
<i>Period</i>	<i>Obligations</i>		
07/27/1990-12/31/1994	FY94: \$111,049	TOTAL: \$478,249	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J J MACFARLANE	HQ/G R RIEGLER	11-Astronomy	
NAGW 2411 University of Wisconsin - Madison 8688			
INVESTIGATION OF MOTIONS, MORPHOLOGY, STRUCTURE, AND EVOLUTION OF NEPTUNE'S CLOUDS			
<i>Period</i>	<i>Obligations</i>		
08/02/1991-12/31/1993	FY94: \$0	TOTAL: \$342,618	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L A SROMOVSKY	HQ/W L QUAIDE	19-Phys Sci, NEC	
NAGW 2420 University of Wisconsin - Madison 8689			
DISK INSTABILITIES, BARS AND ACCRETION: FEEDING THE MONSTER			
<i>Period</i>	<i>Obligations</i>		
04/19/1991-12/31/1994	FY94: \$33,480	TOTAL: \$225,199	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L S SPARKE	HQ/G S KUTTER	11-Astronomy	
	HQ/G R RIEGLER		
NAGW 2520 University of Wisconsin - Madison 8690			
THE PROPERTIES OF INTERSTELLAR DUST AND APPLICATIONS TO ASTROPHYSICAL PROBLEMS			
<i>Period</i>	<i>Obligations</i>		
07/17/1991-05/31/1994	FY94: \$0	TOTAL: \$272,377	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J A CARDELLI	HQ/G S KUTTER	11-Astronomy	
	HQ/G R RIEGLER		
NAGW 2532 University of Wisconsin - Madison 8691			
NAGW-2532/UNIV WISCONSIN/NUMERICAL SIMULATIONS OF EXPLOSIVE EVENTS AND HOT GAS IN INTERSTELLAR MEDIA			
<i>Period</i>	<i>Obligations</i>		
05/23/1991-03/31/1995	FY94: \$25,000	TOTAL: \$322,494	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D P COX	HQ/G S KUTTER	11-Astronomy	
	HQ/G R RIEGLER		
NAGW 2536 University of Wisconsin - Madison 8692			
THERMAL INFRARED REMOTE SENSING AND BIOSPHERIC PROCESSES			
<i>Period</i>	<i>Obligations</i>		
07/10/1991-03/31/1994	FY94: \$0	TOTAL: \$188,823	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J M NORMAN	HQ/G ASRAR	39-Env Sci, NEC	
	HQ/D E WICKLAND		
NAGW 2643 University of Wisconsin - Madison 8693			
EXPERIMENTAL INVESTIGATION OF COOLING AND REHEATING OF NEUTRON STARS			
<i>Period</i>	<i>Obligations</i>		
08/22/1991-04/30/1995	FY94: \$100,000	TOTAL: \$392,100	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H B OGELMAN	HQ/G S KUTTER	11-Astronomy	
	HQ/G R RIEGLER		
NAGW 2751 University of Wisconsin - Madison 8694			
INVESTIGATION OF BIOMASS BURNING IN THE AMAZON USING THE GEOSTATIONARY VISSR ATMOSPHERIC SOUNDER			
<i>Period</i>	<i>Obligations</i>		
09/24/1991-05/31/1993	FY94: \$0	TOTAL: \$81,797	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W P MENZEL	HQ/A C JANETOS	39-Env Sci, NEC	
	HQ/R T WATSON		
NAGW 2835 University of Wisconsin - Madison 8695			
NAGW-2835/UNIV WISCONSIN/GLASS FORMATION AND NUCLEATION IN MICROGRAVITY CONTAINERLESS-PROCESSED INVIS			
<i>Period</i>	<i>Obligations</i>		
01/15/1992-11/30/1994	FY94: \$95,000	TOTAL: \$285,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R F COOPER	HQ/B M CARPENTER	13-Physics	
J H PEREPEZKO			
NAGW 2841 University of Wisconsin - Madison 8696			
CONTAINERLESS PROCESSING FOR CONTROLLED SOLIDIFICATION MICROSTRUCTURES			
<i>Period</i>	<i>Obligations</i>		
01/31/1992-11/30/1995	FY94: \$105,000	TOTAL: \$315,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J H PEREPEZKO	HQ/B M CARPENTER	13-Physics	

**NASA'S UNIVERSITY PROGRAM
WISCONSIN (Continued)**

NAGW 2908 University of Wisconsin - Madison 8697
THE MEASUREMENT OF VACUUM ULTRAVIOLET ATOMIC TRANS-
ITION PROBABILITIES OF ASTROPHYSICAL INTEREST
Period Obligations
02/20/1992-12/31/1993 FY94: \$88,000 TOTAL: \$264,000
Pnn Invest NASA Tech Officer CASE Category
J E LAWLER HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3318 University of Wisconsin - Madison 8704
ASSESSING THE GEOMORPHIC EVOLUTION AND HYDROGRAPHIC
CHANGES INDUCED BY WINTER STORMS ALONG THE
Period Obligations
02/02/1993-11/30/1993 FY94: \$141,036 TOTAL: \$282,294
Pnn Invest NASA Tech Officer CASE Category
W P MENZEL HQ/M BALTUCK 32-Geological Sci
O K HUH

NAGW 2921 University of Wisconsin - Madison 8698
THEORETICAL MODELS AND ANALYSIS TOOLS FOR EUV, ULT-
RAVIOLET, AND OPTICAL OBSERVATIONS
Period Obligations
02/26/1992-12/31/1993 FY94: \$0 TOTAL: \$115,000
Pnn Invest NASA Tech Officer CASE Category
K BJORKMAN HQ/R STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 3319 University of Wisconsin - Madison 8705
HIGH SPECTRAL RESOLUTION OBSERVATIONS OF IO AND CO
METS
Period Obligations
01/04/1993-10/31/1994 FY94: \$56,640 TOTAL: \$115,640
Pnn Invest NASA Tech Officer CASE Category
F SCHERH HQ/H C BRINTON 11-Astronomy

NAGW 2943 University of Wisconsin - Madison 8699
DYNAMICAL AND CHEMICAL STUDIES OF THE MIDDLE ATMOS-
PHERE USING SATELLITE DATA
Period Obligations
02/28/1992-12/31/1994 FY94: \$110,000 TOTAL: \$310,134
Pnn Invest NASA Tech Officer CASE Category
M H HITOHMAN HQ/J A KAYE 31-Atmos Sci
HQ/R E MURPHY

NAGW 3641 University of Wisconsin - Madison 8706
MECHANISMS OF MONSOON RAINFALL IN THE INDO-PACIFIC
REGION
Period Obligations
06/04/1993-05/31/1994 FY94: \$0 TOTAL: \$109,522
Pnn Invest NASA Tech Officer CASE Category
D MARTIN HQ/J C DODGE 31-Atmos Sci

NAGW 2961 University of Wisconsin - Madison 8700
SOME NEW MATHEMATICAL METHODS OF VARIATIONAL OBJEC-
TIVE ANALYSIS
Period Obligations
10/09/1992-12/31/1994 FY94: \$90,000 TOTAL: \$245,000
Pnn Invest NASA Tech Officer CASE Category
G WAHBA HQ/K H BERGNAN 31-Atmos Sci
HQ/R A SCHIFFER

NAGW 3660 University of Wisconsin - Madison 8707
A STUDY OF ANTIREFLECTIVE COATINGS TO ENHANCE THE UV
RESPONSE OF CCDs
Period Obligations
06/11/1993-12/31/1993 FY94: \$0 TOTAL: \$19,860
Pnn Invest NASA Tech Officer CASE Category
C L JOSEPH HQ/R V STACHNIK 11-Astronomy
HQ/E J WEILER

NAGW 2973 University of Wisconsin - Madison 8701
MULTI-SATELLITE ESTIMATES OF LAND-SURFACE PROPERTIES FOR
DETERMINATION OF ENERGY AND WATER BUDGETS
Period Obligations
03/06/1992-12/31/1994 FY94: \$67,343 TOTAL: \$345,684
Pnn Invest NASA Tech Officer CASE Category
W P MENZEL HQ/J C DODGE 39-Env Sci, NEC
HQ/R A SCHIFFER

NAGW 3708 University of Wisconsin - Madison 8708
LARGE EDDY SIMULATION OF CLEAR AIR CONVECTION OVER THE
FIRE SITE
Period Obligations
08/10/1993-12/31/1993 FY94: \$0 TOTAL: \$50,000
Pnn Invest NASA Tech Officer CASE Category
E W FLORANTA HQ/D E WICKLAND 39-Env Sci, NEC
HQ/A C JANETOS

NAGW 3004 University of Wisconsin - Madison 8702
GROWTH OF ORGANIC SINGLE CRYSTALS BY TWO MODIFIED
FLOATING-ZONE PROCESSES
Period Obligations
03/11/1992-02/28/1997 FY94: \$0 TOTAL: \$45,000
Pnn Invest NASA Tech Officer CASE Category
S KOU HQ/B M CARPENTER 49-Engr, NEC

NAGW 3732 University of Wisconsin - Madison 8709
DEVELOPMENT OF TEACHING CURRICULA TO MODERNIZE INS-
TRUCTION IN THE SCIENCES
Period Obligations
09/03/1993-07/31/1994 FY94: \$0 TOTAL: \$34,775
Pnn Invest NASA Tech Officer CASE Category
W L SMITH HQ/D M BUTLER 39-Env Sci, NEC

NAGW 3286 University of Wisconsin - Madison 8703
NAGW-3286/UNIV WISCONSIN/PROTOTYPING THE BENCHMARK
GOES PATHFINDER DATA SET PROCESSING
Period Obligations
11/27/1992-08/31/1993 FY94: \$721,000 TOTAL: \$1,541,000
Pnn Invest NASA Tech Officer CASE Category
F P BRETHERTON HQ/M E MAIDEN 31-Atmos Sci
HQ/D M BUTLER

NAGW 3804 University of Wisconsin - Madison 8710
INVESTIGATION OF BIOMASS BURING AND AEROSOL LOADING AND
TRANSPORT
Period Obligations
10/29/1993-08/31/1995 FY94: \$153,117 TOTAL: \$153,117
Pnn Invest NASA Tech Officer CASE Category
P MENZEL HQ/J C DODGE 39-Env Sci, NEC
HQ/A C JANETOS

**NASA'S UNIVERSITY PROGRAM
WISCONSIN (Continued)**

NAGW 3833 University of Wisconsin - Madison 8711
NAGW-3833 B UNIV. WISCON. MADISON ; INTERPRET. OF UV
OBSERV. INTERSTELLAR MEDIUM

Period	Obligations	
12/14/1993-12/31/1994	FY94: \$42,999	TOTAL: \$42,999
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J S MATHIS	HQ/R V STACHNIK	11-Astronomy
	HQ/E J WEILER	

NAGW 3935 University of Wisconsin - Madison 8718
RADIATIVE ENERGY BUDGET STUDIES USING OBSERVATIONS
FROM EARTH

Period	Obligations	
04/08/1994-12/31/1996	FY94: \$149,321	TOTAL: \$149,321
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
S A ACKERMAN	HQ/J C DODGE	31-Atmos Sci
	HQ/R A SCHIFFER	

NAGW 3877 University of Wisconsin - Madison 8712
NAGW-3877/B UNIV. WISC MADISON 'ACCRET. DISKS AND PL ANET.
SYSTE. IN NEWLY FORMED, MASSIVE STARS.'

Period	Obligations	
02/28/1994-12/31/1994	FY94: \$73,918	TOTAL: \$73,918
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E CHURCHWELL	HQ/J H RAHE	11-Astronomy

NAGW 3987 University of Wisconsin - Madison 8719
EFFETCS OF HINDLIMB SUSPENSION ON SKELETAL MUSCLE
GROWTH

Period	Obligations	
05/04/1994-03/31/1997	FY94: \$76,000	TOTAL: \$76,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
E SCHULTZ	HQ/T W HALSTEAD	51-Biological Sci

NAGW 3889 University of Wisconsin - Madison 8713
ER-2 HIGH RESOLUTION INTERFEROMETER SOUNDER (HIS)
MEASUREMENTS DURING ASHOM-1994'

Period	Obligations	
03/11/1994-02/28/1995	FY94: \$118,068	TOTAL: \$118,068
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W L SMITH	HQ/M J KURYLO	31-Atmos Sci
	HQ/A C JANETOS	

NAGW 4022 University of Wisconsin - Madison 8720
SPACE EXPERIMENT OF TUBER DEVELOPMENT AND STARCH A
CCUMULATION FOR CELESS'

Period	Obligations	
06/23/1994-02/28/1995	FY94: \$75,987	TOTAL: \$75,987
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
T W TIBBITTS	HQ/M M AVERNER	51-Biological Sci
J G CROXDALE		
C S BROWN		

NAGW 3895 University of Wisconsin - Madison 8714
UNIV WISC.; PARADISE - A PARALLEL INFORMATION SYST EM FOR
EOSDIS

Period	Obligations	
03/31/1994-04/30/1995	FY94: \$73,797	TOTAL: \$73,797
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D J DEWITT	HQ/G H MUCKLOW	22-Computer Science
	HQ/J H BREDEKAMP	

NAGW 4053 University of Wisconsin - Madison 8721
MOLECULAR GENETICS OF ROOT THIGMOPRESPONSIVENESS IN
ARABIDOPSIS THALIANA

Period	Obligations	
06/30/1994-03/30/1997	FY94: \$117,249	TOTAL: \$117,249
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
P MASSON	HQ/T W HALSTEAD	51-Biological Sci

NAGW 3897 University of Wisconsin - Madison 8715
NAGW-3897/B UNIV. OF WISCONSIN/MADISON 'ISENTROPIC
ANALYSIS AND MODELING OF THE SOUTHERN.' 12-MO

Period	Obligations	
03/18/1994-12/14/1994	FY94: \$95,430	TOTAL: \$95,430
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
D R JOHNSON	HQ/M J KURYLO	31-Atmos Sci
	HQ/J KAYE	

NAGW 4100 University of Wisconsin - Madison 8722
ADVANCED TECHNOLOGY REPLACEMENTS (AT-MCPS) FOR GLA SS
MICROCHANNEL PLATES

Period	Obligations	
09/21/1994-09/30/1995	FY94: \$14,003	TOTAL: \$14,003
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C L JOSEPH	HQ/R V STACHNIK	11-Astronomy
	HQ/E J WEILER	

NAGW 3914 University of Wisconsin - Madison 8716
INGESTING DATA USING WORKSTATION CLUSTERS

Period	Obligations	
04/14/1994-04/30/1995	FY94: \$145,833	TOTAL: \$145,833
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M LIVNY	HQ/G H MUCKLOW	22-Computer Science
	HQ/J H BREDEKAMP	

NAG10-64 University of Wisconsin - Madison 8723
MICROGRAVITY EFFECTS DURING FERTILIZATION CELL DIV
DEVELOPMENT AND CALCIUM METABOLISM SEA URCHINS

Period	Obligations	
08/01/1989-02/28/1995	FY94: \$121,814	TOTAL: \$627,432
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
H SCHATTEN	KSC/W KNOTT	54-Env Biology

NAGW 3921 University of Wisconsin - Madison 8717
ANALYSIS AND VISUALIZATION OF SEQUENCE DATA

Period	Obligations	
04/08/1994-12/31/1996	FY94: \$155,962	TOTAL: \$155,962
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R RAMAKRISHNAN	HQ/G H MUCKLOW	22-Computer Science
	HQ/J H BREDEKAMP	

NAS 1-19958 University of Wisconsin - Madison 8724
SAGE II SCIENTIFIC INVESTIGATIONS

Period	Obligations	
05/14/1993-05/13/1996	FY94: \$30,000	TOTAL: \$60,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
M H HITCHMAN	LARC/G L MADDREA	31-Atmos Sci
	LARC/M P MC CORMICK	

**NASA'S UNIVERSITY PROGRAM
WISCONSIN (Continued)**

NAS 2-12939 University of Wisconsin - Madison 8725			
OPERATION AND MAINT. OF SQUIRREL MONKEY COLONY			
<i>Period</i>	<i>Obligations</i>		
06/01/1989-12/31/1993	FY94: \$0	TOTAL: \$971,987	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L COE	ARC/W L HOWER	51-Biological Sci	
V REINHARDT	ARC/J A FERANDIN		
H CHRISPEN			
NAS 5-26078 University of Wisconsin - Madison 8726			
DEF PHASE EFFORT OF SPACELAB DIFFUSE SOFT X-RAY BRAGG SPECTROMETER EXPERIMENT			
<i>Period</i>	<i>Obligations</i>		
03/10/1980-03/14/1995	FY94: \$354,175	TOTAL: \$10,801,412	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W T DUNKER	GSFC/S C DUNKER	11-Astronomy	
NAS 5-26777 University of Wisconsin - Madison 8727			
DEVELOPMENT OF ULTRAVIOLET PHOTO-POLARIMETER EXPERIMENT			
<i>Period</i>	<i>Obligations</i>		
09/04/1981-09/30/1994	FY94: \$2,017,000	TOTAL: \$17,639,910	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A D COPE	MSFC/J H OWENS	11-Astronomy	
K NORDSIECK			
NAS 5-30131 University of Wisconsin - Madison 8728			
SPACE TELESCOPE IMAGINE SPECTROGRAPH SUPPORT			
<i>Period</i>	<i>Obligations</i>		
09/22/1987-09/30/1997	FY94: \$129,000	TOTAL: \$272,954	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
F ROESLER	GSFC/H D VITAGLIANO	11-Astronomy	
NAS 5-30752 University of Wisconsin - Madison 8729			
INVESTIGATION OF THE LASER ATMOSPHERE WIND SOUNDER			
<i>Period</i>	<i>Obligations</i>		
01/29/1990-12/31/1994	FY94: \$10,000	TOTAL: \$225,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J ANDERSON	GSFC/R ATLAS	31-Atmos Sci	
NAS 5-31367 University of Wisconsin - Madison 8730			
EOS STUDY			
<i>Period</i>	<i>Obligations</i>		
12/30/1991-12/14/2001	FY94: \$291,500	TOTAL: \$633,695	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P MENZEL	GSFC/H OSEROFF	31-Atmos Sci	
NAS 5-31375 University of Wisconsin - Madison 8731			
EOS AIRS INVESTIGATION			
<i>Period</i>	<i>Obligations</i>		
01/13/1992-12/14/2001	FY94: \$129,000	TOTAL: \$409,915	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H REVERCOMB	GSFC/E KREINS	31-Atmos Sci	
NAS 5-31377 University of Wisconsin - Madison 8732			
EOS INVESTIGATION: ALGORITHM DEVELOPMENT WITH HIS/ AIRS			
<i>Period</i>	<i>Obligations</i>		
01/08/1992-12/14/2001	FY94: \$178,000	TOTAL: \$436,640	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W L SMITH	GSFC/E KREINS	39-Env Sci, NEC	
NAS 5-32646 University of Wisconsin - Madison 8733			
AN XRAY ANALYSIS DATABASE OF PHOTOIONIZATION CROSS SECTIONS INCLUDING VARIABLE IONIZATION			
<i>Period</i>	<i>Obligations</i>		
08/15/1994-09/15/1996	FY94: \$71,000	TOTAL: \$71,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P WANG	GSFC/D WEST	11-Astronomy	
NAS 5-33015 University of Wisconsin - Madison 8734			
GLRS SCIENCE TEAM MEMBER STUDY			
<i>Period</i>	<i>Obligations</i>		
11/01/1989-12/31/1994	FY94: \$100,000	TOTAL: \$182,979	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
C BENTLEY	GSFC/G SOFFEN	39-Env Sci, NEC	
NAS 8-38499 University of Wisconsin - Madison 8735			
STUDY OF GEOPLATFORM PROGRAM			
<i>Period</i>	<i>Obligations</i>		
01/01/1990-12/31/1994	FY94: \$150,242	TOTAL: \$1,401,597	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D L SMITH	MSFC/M GOODMAN	32-Geological Sci	
L P BRETHERTON	MSFC/C LAPENTA		
W P MENZEL			
NAS 8-38664 University of Wisconsin - Madison 8736			
INVESTIGATION X-RAY BACKGROUND SURVEY SPECTROMETER			
<i>Period</i>	<i>Obligations</i>		
06/13/1990-06/30/1994	FY94: \$0	TOTAL: \$99,787	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
W T SANDERS	MSFC/R R JAYRO	11-Astronomy	
NAS 9-18602 University of Wisconsin - Madison 8737			
GVAR INGESTORS			
<i>Period</i>	<i>Obligations</i>		
09/23/1992-03/30/1993	FY94: \$0	TOTAL: \$47,980	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J P ROBERTS	JSC/T U RO	31-Atmos Sci	
NCC 2-542 University of Wisconsin - Madison 8738			
PSYCHOPHYSICAL EVALUATION OF THREE-DIMENSIONAL AUDITORY DISPLAYS			
<i>Period</i>	<i>Obligations</i>		
05/01/1988-04/30/1995	FY94: \$147,997	TOTAL: \$883,862	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
F L WIGHTMAN	ARC/E M WENZEL	69-Psych, NEC	
NCC 2-619 University of Wisconsin - Madison 8739			
PRELIMINARY PILOT DATA FOR SLS-1 EXPERIMENTAL PROTOCOL BIOCHEMICAL MORPHOLOGICAL AND BIOMECHANICAL			
<i>Period</i>	<i>Obligations</i>		
07/19/1989-12/31/1994	FY94: \$60,000	TOTAL: \$229,425	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
A C VAILAS	ARC/E M HOLTON	51-Biological Sci	
NCC 2-679 University of Wisconsin - Madison 8740			
POST-LAUNCHSCIENTIFIC AND TECHNICAL SUPPORT FOR THE GALILEO NET FLUX RADIOMETER EXPERIMENT			
<i>Period</i>	<i>Obligations</i>		
07/02/1990-12/31/1992	FY94: \$0	TOTAL: \$315,097	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L A SROMOVSKY	ARC/L E LASHER	31-Atmos Sci	
	ARC/R E YOUNG		

NASA'S UNIVERSITY PROGRAM **WISCONSIN (Continued)**

NCC 2-780 University of Wisconsin - Madison 8741			
CAD SYSTEM FOR LIQUID CRYSTAL DISPLAY			
<i>Period</i>	<i>Obligations</i>		
02/16/1993-11/30/1994	FY94: \$95,000	TOTAL: \$183,500	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B E SALEH	ARC/J O LARIMER	45-Elec Engr	
NCC 2-854 University of Wisconsin - Madison 8742			
SCIENTIFIC AND TECHNICAL SUPPORT FOR THE GALILEO NET FLUX RADIOMETER EXPERIMENT			
<i>Period</i>	<i>Obligations</i>		
05/25/1994-09/30/1994	FY94: \$150,000	TOTAL: \$150,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
L R SROMOVSKY	ARC/L E LASHER	31-Atmos Sci	
	ARC/R E YOUNG		
NCC 8-52 University of Wisconsin - Madison 8743			
QUANTITATIVE ANALYSIS OF CRYSTAL DEFECTS BY TRIPLE CRYSTAL X-RAY DIFFRACTION			
<i>Period</i>	<i>Obligations</i>		
07/01/1994-06/30/1995	FY94: \$49,158	TOTAL: \$49,158	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R J MATYI	MSFC/D C GILLIES	13-Physics	
	MSFC/S D COBB		
NGT 00-030-034 University of Wisconsin - Madison 8744			
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
10/19/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T M LILLESAND	HQ/G ASRAR	39-Env Sci, NEC	
NGT 00-030-113 University of Wisconsin - Madison 8745			
NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM			
<i>Period</i>	<i>Obligations</i>		
11/02/1992-08/31/1995	FY94: \$0	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R G WAGNER	HQ/G ASRAR	39-Env Sci, NEC	
	HQ/D M BUTLER		
NGT 00-050-666 University of Wisconsin - Madison 8746			
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
10/01/1990-08/31/1993	FY94: \$0	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
K H NORDSIECK	HQ/J K ALEXANDER	11-Astronomy	
NGT 00-050-956 University of Wisconsin - Madison 8747			
NASA GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/24/1992-06/30/1994	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
T TIBBITTS	HQ/J ALEXANDER	55-Agriculture Sci	
NGT 00-051-003 University of Wisconsin - Madison 8748			
NGT-51003/UNIV WISCONSIN "a" MADISON/GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/11/1992-08/31/1995	FY94: \$22,000	TOTAL: \$66,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B D SAVAGE	HQ/J K ALEXANDER	11-Astronomy	
NGT 00-051-067 University of Wisconsin - Madison 8749			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
05/28/1993-06/30/1994	FY94: \$0	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
R F COOPER	HQ/D A HOLLAND	47-Materials Engr	
NGT 00-051-132 University of Wisconsin - Madison 8750			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/28/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
E CHURCHWELL	HQ/D HOLLAND	11-Astronomy	
NGT 00-051-133 University of Wisconsin - Madison 8751			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
07/28/1993-08/31/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J PEREPEZKO	HQ/D A HOLLAND	47-Materials Engr	
NGT 00-051-177 University of Wisconsin - Madison 8752			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
08/18/1993-08/22/1996	FY94: \$22,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
H YUTTEN	JSC/S GOLDSTEIN	22-Computer Science	
NGT 00-051-190 University of Wisconsin - Madison 8753			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/30/1993-08/31/1996	FY94: \$44,000	TOTAL: \$44,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J H PEREPEZKO	HQ/D HOLLAND	47-Materials Engr	
NGT 00-051-208 University of Wisconsin - Madison 8754			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
04/25/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
P K WANG	GSFC/G SOFFEN	31-Atmos Sci	
NGT 00-051-263 University of Wisconsin - Madison 8755			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
06/14/1994-06/30/1997	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
J H BOOSKE	HQ/G LESANE	47-Materials Engr	
NGT 00-051-364 University of Wisconsin - Madison 8756			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/08/1994-08/31/1997	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
D R SMITH	HQ/G A LESANE	47-Materials Engr	
NGT 00-051-368 University of Wisconsin - Madison 8757			
GRADUATE STUDENT RESEARCHERS PROGRAM			
<i>Period</i>	<i>Obligations</i>		
09/13/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000	
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>	
B P MILLER	HQ/P H SMITH	22-Computer Science	

NASA'S UNIVERSITY PROGRAM **WISCONSIN (Continued)**

NGT 00-070-377 University of Wisconsin - Madison 8758
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period Obligations
08/22/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin Invest NASA Tech Officer CASE Category
J W SHAVIK HQ/D K RUSSELL 22-Computer Science

NAG 3-1274 University of Wisconsin - Milwaukee 8759
CHEMICAL VAPOR DEPOSITION OF HIGH TC SUPERCONDUCTING
FILMS IN A MICROGRAVITY ENVIRONMENT
Period Obligations
05/09/1991-06/14/1994 FY94: \$0 TOTAL: \$200,000
Prin Invest NASA Tech Officer CASE Category
M LEVY LERC/T K GLASGOW 13-Physics
B K SARMA
W S MILLMAN

NAG 3-1381 University of Wisconsin - Milwaukee 8760
REWETTING OF MONOGROOVE HEAT PIPE IN SPACE STATION
RADIATORS
Period Obligations
12/23/1992-11/02/1994 FY94: \$85,458 TOTAL: \$176,403
Prin Invest NASA Tech Officer CASE Category
S H CHAN LERC/J A PLATT 46-Mech Engr

NAG 5-925 University of Wisconsin - Milwaukee 8761
PHYSICS OF HAT PIPE REWETTING
Period Obligations
05/24/1991-02/01/1994 FY94: \$0 TOTAL: \$25,000
Prin Invest NASA Tech Officer CASE Category
S H CHAN JSC/E K UNGAR 46-Mech Engr

NAG 9-651 University of Wisconsin - Milwaukee 8762
NEUROENDOCRINE ORGANOID ASSEMBLY IN VITRO
Period Obligations
10/28/1992-02/01/1995 FY94: \$160,000 TOTAL: \$310,000
Prin Invest NASA Tech Officer CASE Category
P I LELKES JSC/G SPAULDING 51-Biological Sci

NAGW 3270 University of Wisconsin - Milwaukee 8763
NAGW-3270/UNIV WISCONSIN MILWAUKEE/EVOLUTIONARY R
ELATIONSHIPS OF S PUTREFACIENS METAL REDUCTASES
Period Obligations
12/04/1992-10/31/1995 FY94: \$182,730 TOTAL: \$369,667
Prin Invest NASA Tech Officer CASE Category
K NEALSON HQ/J D RUMMEL 51-Biological Sci

NGT 00-040-035 University of Wisconsin - Milwaukee 8764
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period Obligations
04/30/1991-02/28/1995 FY94: \$205,000 TOTAL: \$767,000
Prin Invest NASA Tech Officer CASE Category
G T MOORE HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-051-265 University of Wisconsin - Milwaukee 8765
GRADUATE STUDENT RESEARCHERS PROGRAM
Period Obligations
07/08/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin Invest NASA Tech Officer CASE Category
P I LELKES HQ/D HOLLAND 51-Biological Sci

WYOMING

NAG 1-1294 University of Wyoming 8766
MECHANICAL PROPERTIES EVALUATIONS OF NEW THERMOPLA
STIC AND THERMOSET POLYMER MATRICES AND COMPOSITE
Period Obligations
07/11/1991-12/31/1993 FY94: \$21,874 TOTAL: \$111,948
Prin Invest NASA Tech Officer CASE Category
D F ADAMS LARC/N J JOHNSTON 47-Materials Engr
LARC/P M HERGENROTHER

NAG 1-1623 University of Wyoming 8767
AN INVESTIGATION OF AEROSOL MEASUREMENTS FROM THE
HALOGEN OCCULTATION EXPERIMENT: VALIDATION, SIZE
Period Obligations
04/26/1994-02/28/1995 FY94: \$37,500 TOTAL: \$37,500
Prin Invest NASA Tech Officer CASE Category
T DESHLER LARC/J G WELLS JR. 31-Atmos Sci
LARC/J M RUSSELL III

NAG 2-134 University of Wyoming 8768
THE STUDY OF STAR FORMATION AND MOLECULAR CLOUD
EVOLUTION USING THE KUIPER
Period Obligations
10/01/1987-09/30/1994 FY94: \$27,388 TOTAL: \$441,234
Prin Invest NASA Tech Officer CASE Category
H A THRONSON JR ARC/C D LAUGHLIN 11-Astronomy
ARC/H A HENDRIKS

NAG 2-755 University of Wyoming 8769
INFRARED SPECTROSCOPY OF TRANSIENT NOVAE ERUPTIONS:
OBJECTS OF OPPORTUNITY
Period Obligations
01/28/1992-11/30/1993 FY94: \$0 TOTAL: \$30,000
Prin Invest NASA Tech Officer CASE Category
C E WOODWARD ARC/C D LAUGHLIN 11-Astronomy
R D GEHRZ ARC/C M GILLESPIE

NAG 2-877 University of Wyoming 8770
COMPILING DOMAIN SPECIFIC PROGRAM SYNTHESIS SYSTEM S
Period Obligations
01/10/1994-12/31/1994 FY94: \$67,343 TOTAL: \$67,343
Prin Invest NASA Tech Officer CASE Category
J V BALLEEN ARC/P E FRIEDLAND 22-Computer Science

NAG 5-2240 University of Wyoming 8771
AIRBORNE INVESTIGATION OF BIOSPHERE-ATMOSPHERE INT
ERATIONS OVER THE BOREAL FOREST
Period Obligations
04/08/1993-04/14/1995 FY94: \$323,102 TOTAL: \$392,702
Prin Invest NASA Tech Officer CASE Category
R D KELLY GSFC/F G HALL 39-Env Sci, NEC
GSFC/P SELLERS

NAG 5-2709 University of Wyoming 8772
X-RAY OBSERVATIONS OF THE EXPOSED STARBURST GALAXY NGC
2976
Period Obligations
08/26/1994-03/14/1996 FY94: \$15,000 TOTAL: \$15,000
Prin Invest NASA Tech Officer CASE Category
H THRONSON GSFC/R PETRE 11-Astronomy

**NASA'S UNIVERSITY PROGRAM
WYOMING (Continued)**

NAG 8-249 University of Wyoming 8773
DATA AND SIGNAL PROCESSING FOR THE LASER ATMOSPHERIC
WIND SOUNDER
Period *Obligations*
08/24/1992-10/31/1994 FY94: \$34,986 TOTAL: \$69,986
Prin. Invest *NASA Tech. Officer* *CASE Category*
R INGUVA MSFC/M J KAVAYA 13-Physics
MSFC/J ROTHERMEL

NAG 9-634 University of Wyoming 8774
INCREASE AUTONOMY OF EVA RETRIEVER VISION SYSTEM
Period *Obligations*
08/24/1992-08/31/1993 FY94: \$0 TOTAL: \$14,993
Prin. Invest *NASA Tech. Officer* *CASE Category*
M MAGEE JSC/S H GOLDSTEIN 22-Computer Science

NAG 9-722 University of Wyoming 8775
EVALUATION OF FAULT DETECTION, ISOLATION AND RECOVERY
CAPABILITIES IN ORBITING COMMUNICATION SUBSYSTEMS
Period *Obligations*
12/03/1993-10/01/1994 FY94: \$15,982 TOTAL: \$15,982
Prin. Invest *NASA Tech. Officer* *CASE Category*
R E GANTENBEIN JSC/S H GOLDSTEIN 29-Math/Computer, NEC

NAGW 1276 University of Wyoming 8776
INFRARED SPECKLE INTERFEROMETRY
Period *Obligations*
04/15/1988-11/30/1995 FY94: \$0 TOTAL: \$182,803
Prin. Invest *NASA Tech. Officer* *CASE Category*
R R HOWELL HQ/H C BRINTON 11-Astronomy
HQ/J H RAHE

NAGW 2222 University of Wyoming 8777
SURFACE-ATMOSPHERE INTERACTIONS IN THE DEVELOPMENT OF
THE MARTIAN POLAR LANDSCAPE
Period *Obligations*
02/22/1991-05/31/1993 FY94: \$0 TOTAL: \$71,643
Prin. Invest *NASA Tech. Officer* *CASE Category*
T R PARISH HQ/T A MAXWELL 32-Geological Sci

NAGW 2666 University of Wyoming 8778
NAGW-2666/UNIV WYOMING/GENERAL CIRCULATION MODEL
SIMULATIONS FOR ANTARCTICA
Period *Obligations*
09/24/1991-05/31/1995 FY94: \$63,080 TOTAL: \$194,492
Prin. Invest *NASA Tech. Officer* *CASE Category*
T R PARISH HQ/R H THOMAS 39-Env Sci, NEC
HQ/R A SCHIFFER

NAGW 2808 University of Wyoming 8779
DIRECT COUPLING OF ATMOSPHERIC WARMING TO PLANT ECO-
LOGY NOCTURNAL RADIATION EXCHANGE, FROST OCCURRENCE
Period *Obligations*
01/06/1992-01/31/1994 FY94: \$88,388 TOTAL: \$270,063
Prin. Invest *NASA Tech. Officer* *CASE Category*
W K SMITH HQ/J K ALEXANDER 54-Env Biology
HQ/D A HOLLAND

NAGW 3749 University of Wyoming 8780
VERTICAL PROFILES OF CLOUD CONDENSATION NUCLEI
Period *Obligations*
10/13/1993-11/30/1994 FY94: \$225,502 TOTAL: \$225,502
Prin. Invest *NASA Tech. Officer* *CASE Category*
T DESHER HQ/J T SUTTLES 31-Atmos Sci
J R SNIDER HQ/A C JANETOS
G VALI

NAS 1-18945 University of Wyoming 8781
SAGE III SCIENCE INVESTIGATION SUPPORT P.I. - DR GABOR VALI
Period *Obligations*
01/17/1990-01/31/1995 FY94: \$40,000 TOTAL: \$109,750
Prin. Invest *NASA Tech. Officer* *CASE Category*
G VALI LARC/G L MADDREA 31-Atmos Sci
LARC/L R MCMASTER

NGT 00-040-050 University of Wyoming 8782
NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
Period *Obligations*
07/24/1991-03/31/1995 FY94: \$170,000 TOTAL: \$518,000
Prin. Invest *NASA Tech. Officer* *CASE Category*
P E JOHNSON HQ/E T SCHWARTZ 99-Multi-Discip

PUERTO RICO

NAG13-19 Univ of Puerto Rico-Med Sciences 8783
RELATIONSHIP BETWEEN LAND USE AND HEALTH ASSOCIATE
WATER QUALITY PARAMETERS IN RIVERS IN LUQUILLO FO
Period *Obligations*
01/17/1992-12/31/1993 FY94: \$54,973 TOTAL: \$157,423
Prin. Invest *NASA Tech. Officer* *CASE Category*
J NORAT SSC/A T JOYCE 54-Env Biology
F D FOLCH

NAG13-29 Univ of Puerto Rico-Med Sciences 8784
LAND USE PATTERNS AND FECAL CONTAMINATION IN WESTERN
PUERTO RICO
Period *Obligations*
12/17/1993-12/16/1994 FY94: \$75,447 TOTAL: \$75,447
Prin. Invest *NASA Tech. Officer* *CASE Category*
NORAT SSC/JOYCE 39-Env Sci, NEC

NGT 00-070-391 Univ of Puerto Rico-Med Sciences 8785
NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
MINORITY FOCUS PROGRAM
Period *Obligations*
08/25/1994-06/30/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest *NASA Tech. Officer* *CASE Category*
J NORAT HQ/D RUSSELL 39-Env Sci, NEC

NAG 1-1496 University of Puerto Rico - Mayaguez 8786
TECHNIQUES FOR THE ANALYSIS OF SYSTEMS WITH DAMPING
MATERIALS BY THE FRACTIONAL DERIVATIVE
Period *Obligations*
04/19/1993-06/01/1995 FY94: \$0 TOTAL: \$74,998
Prin. Invest *NASA Tech. Officer* *CASE Category*
L SUAREZ LARC/L G HORTA 46-Mech Engr

NAG 5-2188 University of Puerto Rico - Mayaguez 8787
SOFT X-RAY OPTICS BY PULSED LASER DEPOSITION
Period *Obligations*
02/04/1993-02/14/1995 FY94: \$55,400 TOTAL: \$112,821
Prin. Invest *NASA Tech. Officer* *CASE Category*
F E FERNANDEZ GSFC/R A KESKI-KUHA 13-Physics

NASA'S UNIVERSITY PROGRAM
PUERTO RICO (Continued)

NAG 8-193 University of Puerto Rico - Mayaguez 8788
 JOINT VENTURE
Period *Obligations*
 05/17/1991-05/01/1995 FY94: \$35,966 TOTAL: \$139,546
Prin. Invest. NASA Tech. Officer CASE Category
 J MACARI MSFC/F SIX 11-Astronomy
 A BARRIENTOS

NAG 8-1085 University of Puerto Rico - Mayaguez 8789
 CRYSTAL STUDIES
Period *Obligations*
 09/15/1994-09/14/1995 FY94: \$25,495 TOTAL: \$25,495
Prin. Invest. NASA Tech. Officer CASE Category
 A BARRIENTAS MSFC/M V LASSE 13-Physics
 MSFC/W J LOVE

NAGW 2912 University of Puerto Rico - Mayaguez 8790
 REMOTE SENSING OF CHLOROPHYLL AND SEDIMENTS IN COA
 STAL WATERS OF PUERTO RICO
Period *Obligations*
 02/20/1992-12/31/1992 FY94: \$0 TOTAL: \$225,000
Prin. Invest. NASA Tech. Officer CASE Category
 J M DIAZ HQ/J C DODGE 33-Oceanography
 HQ/A J TUYAHOV

NAGW 3926 University of Puerto Rico - Mayaguez 8791
 EFFECTS OF MASSIVE RIVERINE INPUT
Period *Obligations*
 04/14/1994-04/01/1997 FY94: \$183,900 TOTAL: \$183,900
Prin. Invest. NASA Tech. Officer CASE Category
 J E CORREDOR HQ/A C JANETOS 33-Oceanography

NAG13-17 University of Puerto Rico - Mayaguez 8792
 USE OF A GIS AND REMOTE SENSING TECHNOLOGY
Period *Obligations*
 12/13/1991-12/31/1994 FY94: \$74,876 TOTAL: \$206,790
Prin. Invest. NASA Tech. Officer CASE Category
 L L RODRIGUEZ SSC/A T JOYCE 39-Env Sci, NEC

NCC 8-37 University of Puerto Rico - Mayaguez 8793
 FABRICATION OF ORGANIC AND POLYMER GUIDING ORGANIC
 FILMS FROM MELT
Period *Obligations*
 05/24/1994-05/25/1995 FY94: \$43,575 TOTAL: \$43,575
Prin. Invest. NASA Tech. Officer CASE Category
 A LEYDERMAN MSFC/B PENN 12-Chemistry

NCCW 56 University of Puerto Rico - Rio Tiedras 8794
 NASA EPSCOR PROGRAM
Period *Obligations*
 08/16/1994-04/30/1997 FY94: \$1,000,000 TOTAL: \$1,000,000
Prin. Invest. NASA Tech. Officer CASE Category
 J G LAGOA HQ/A S MCGEE 99-Multi-Discip
 HQ/E T SCHWARTZ

NGT 00-030-272 University of Puerto Rico - Mayaguez 8795
 NASA GLOBAL CHANGE GRADUATE FELLOWSHIP PROGRAM
Period *Obligations*
 09/22/1994-08/31/1995 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 J CORREDOR HQ/A C JANETOS 39-Env Sci, NEC
 HQ/G ASRAR

NGT 00-040-053 University of Puerto Rico - Mayaguez 8796
 NGT-40053/UNIV PUERTO RICO/NATIONAL SPACE GRANT
 FELLOWSHIP PROGRAM
Period *Obligations*
 04/27/1992-01/31/1995 FY94: \$150,000 TOTAL: \$450,000
Prin. Invest. NASA Tech. Officer CASE Category
 J G GONZALES HQ/E T SCHWARTZ 99-Multi-Discip

NGT 00-051-340 University of Puerto Rico - Mayaguez 8797
 GRADUATE STUDENT RESEARCHERS PROGRAM
Period *Obligations*
 07/29/1994-06/30/1997 FY94: \$22,000 TOTAL: \$22,000
Prin. Invest. NASA Tech. Officer CASE Category
 R E VASQUEZ SSC/A JOYCE 45-Elec Engr

NGT 00-070-195 University of Puerto Rico - Mayaguez 8798
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period *Obligations*
 08/13/1990-07/31/1993 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 J M LOPEZ HQ/F C OWENS 33-Oceanography

NGT 00-070-209 University of Puerto Rico - Mayaguez 8799
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period *Obligations*
 08/16/1991-07/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 J M LOPEZ HQ/F C OWENS 33-Oceanography

NGT 00-070-238 University of Puerto Rico - Mayaguez 8800
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period *Obligations*
 08/16/1991-07/31/1994 FY94: \$0 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 J M LOPEZ HQ/J T LYNCH 33-Oceanography

NGT 00-070-259 University of Puerto Rico - Mayaguez 8801
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period *Obligations*
 05/04/1992-06/30/1995 FY94: \$22,000 TOTAL: \$66,000
Prin. Invest. NASA Tech. Officer CASE Category
 J M LOPEZ SSC/A JOYCE 33-Oceanography

NGT 00-070-311 University of Puerto Rico - Mayaguez 8802
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period *Obligations*
 05/28/1993-05/31/1995 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 R VASQUEZ HQ/D K RUSSELL 33-Oceanography

NGT 00-070-319 University of Puerto Rico - Mayaguez 8803
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM
Period *Obligations*
 06/29/1993-07/31/1996 FY94: \$22,000 TOTAL: \$44,000
Prin. Invest. NASA Tech. Officer CASE Category
 J M LOPEZ HQ/D K RUSSELL 33-Oceanography

NASA'S UNIVERSITY PROGRAM
PUERTO RICO (Continued)

NGT 00-070-320 University of Puerto Rico - Mayaguez 8804
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations	
06/29/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M LOPEZ	HQ/D K RUSSELL	33-Oceanography

NGT 00-070-322 University of Puerto Rico - Mayaguez 8805
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations	
06/29/1993-08/14/1995	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A LEYDERMAN	HQ/D K RUSSELL	13-Physics

NGT 00-070-323 University of Puerto Rico - Mayaguez 8806
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations	
07/05/1993-07/31/1996	FY94: \$22,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J M LOPEZ	HQ/D K RUSSELL	33-Oceanography

NGT 00-070-362 University of Puerto Rico - Mayaguez 8807
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations	
08/12/1993-12/31/1994	FY94: \$14,000	TOTAL: \$36,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R VASQUEZ	HQ/D K RUSSELL	45-Elec Engr

NGT 00-070-392 University of Puerto Rico - Mayaguez 8808
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations	
08/19/1994-04/30/1995	FY94: \$44,000	TOTAL: \$44,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A LEYDERMAN	HQ/D K RUSSELL	19-Phys Sci, NEC
J CORREDOR		

NAG 8-1003 University of Puerto Rico Humacao Univ 8809
College

JOVE

Period	Obligations	
01/25/1994-05/31/1995	FY94: \$53,607	TOTAL: \$53,607
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
C HERNANDEZ	MSFC/F SIX	13-Physics
F ZYPMAN		

NAG 8-260 University of Puerto Rico-Rio Piedras 8810

JOVE

Period	Obligations	
12/30/1992-05/31/1995	FY94: \$39,000	TOTAL: \$98,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R LUGO-ESCHENWALD	MSFC/F SIX	51-Biological Sci
E SOBRINO		

NAGW 4059 University of Puerto Rico-Rio Piedras 8811
 LAND MANAGEMENT IN THE TROPICS AND ITS EFFECTS ON GLOBAL
 ENVIRONMENT

Period	Obligations	
08/08/1994-08/14/1995	FY94: \$400,000	TOTAL: \$400,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
B R WEINER	HQ/B L WHITE	39-Env Sci, NEC

NAG13-18 University of Puerto Rico-Rio Piedras 8812
 PRIMARY PRODUCTIVITY AND REMOTE SENSING OF TROPICAL
 VEGETATION

Period	Obligations	
12/26/1991-11/30/1994	FY94: \$55,535	TOTAL: \$158,608
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
N FLETCHER	SSC/A T JOYCE	39-Env Sci, NEC

NGT 00-070-239 University of Puerto Rico-Rio Piedras 8813
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations	
12/11/1991-12/31/1994	FY94: \$22,000	TOTAL: \$66,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
A D CRUZ	SSC/A JOYCE	39-Env Sci, NEC

NGT 00-070-393 University of Puerto Rico-Rio Piedras 8814
 NASA GRADUATE STUDENT RESEARCHERS UNDERREPRESENTED
 MINORITY FOCUS PROGRAM

Period	Obligations	
08/31/1994-06/30/1995	FY94: \$22,000	TOTAL: \$22,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
G TORANZOS	HQ/D K RUSSELL	51-Biological Sci

NAG 1-1347 University of Turabo 8815
 PRE-ENGINEERING PREPARATORY PROGRAM

Period	Obligations	
09/24/1991-09/30/1992	FY94:	TOTAL: \$103,721
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
W R DAWES	LARC/R L YANG	49-Engr, NEC

NGT 00-090-157 University of Turabo 8816
 PRE ENGINEERING PREPARATORY PROGRAM

Period	Obligations	
04/02/1993-09/30/1994	FY94: \$0	TOTAL: \$220,000
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
U C DAWES	LARC/R YANG	99-Multi-Discip
	LARC/B WHITE	

AUSTRALIA

NAGW 3760 Curtin University of Technology 8817
 ROSAT OBSERVATIONS OF TWO NEARBY RADIO PULSARS

Period	Obligations	
09/29/1993-07/31/1994	FY94: \$3,115	TOTAL: \$3,115
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
J D BIGGS	HQ/L J KALUZIENSKI	11-Astronomy
	HQ/A N BUNNER	

NAGW 674 University of Queensland 8818
 SHOCK TUNNEL STUDIES OF SCRAMJET PHENOMANENA

Period	Obligations	
01/01/1985-12/31/1994	FY94: \$80,496	TOTAL: \$2,175,953
<i>Prin. Invest.</i>	<i>NASA Tech. Officer</i>	<i>CASE Category</i>
R J STALKER	LARC/G Y ANDERSON	41-Aero Engr
R G MORGAN	HQ/J SUDDRETH	
A PAUL		

NASA'S UNIVERSITY PROGRAM **AUSTRALIA (Continued)**

NAGW 2495 **University of Queensland** **8819**
NAGW-2495/UNIV QUEENSLAND/RADIATION DEGRADATION OF
POLYMERIC MATERIALS IN SPACE ENVIRONMENTS
Period *Obligations*
06/21/1991-04/30/1993 FY94: \$0 TOTAL: \$139,350
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J H O'DONNELL LARC/P R YOUNG 12-Chemistry
D J HILL LARC/W S SLEMP
G A GEORGE

NAGW 4132 **Surrey University** **8825**
FORMEX CONFIGURATION PROCESSING
Period *Obligations*
09/08/1994-06/30/1995 FY94: \$35,000 TOTAL: \$35,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H NOOSHIN ARC/K K GUPTA 41-Aero Engr

NAGW 3198 **University of Leeds** **8826**
NAGW-3198/UNIV LEEDS/GENERIC DESIGN OF A DOUBLE DELTA
WING USING THE PDE METHOD
Period *Obligations*
08/28/1992-12/31/1994 FY94: \$30,750 TOTAL: \$60,600
Prin. Invest. *NASA Tech. Officer* *CASE Category*
M I BLOOR LARC/R E SMITH 41-Aero Engr
M J WILSON LARC/J J LAMBIOTTE

CANADA

NAGW 3792 **University British Columbia** **8820**
NUMERICAL SIMULATIONS OF VOLCANO AND GEYSER ERUPTIONS
ON EARTH, MARS, VENUS, IO AND TRITON
Period *Obligations*
10/13/1993-09/30/1994 FY94: \$57,000 TOTAL: \$57,000
Prin. Invest. *NASA Tech. Officer* *CASE Category*
S W KIEFFER HQ/J M BOYCE 32-Geological Sci

NAGW 3112 **University of Waterloo** **8821**
NAGW-3112/UNIV WATERLOO/A NEW LAGRANGIAN METHOD FOR
HYPERSONIC FLOW COMPUTATION WITH APPLICATIONS
Period *Obligations*
06/22/1992-12/31/1992 FY94: \$0 TOTAL: \$59,950
Prin. Invest. *NASA Tech. Officer* *CASE Category*
W H HUI LERC/M S LIU 41-Aero Engr

NAS 5-30294 **York University** **8822**
HUBBLE SPACE TELESCOPE GUARANTEED TIME OBSERVATION
PROGRAM SUPPORT
Period *Obligations*
01/20/1988-12/31/1996 FY94: \$104,500 TOTAL: \$721,188
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J J CALDWELL GSFC/J K KALINOWSKI 42-Astro Engr

CHILE

NAS 5-1925 **University of Chile** **8823**
MANDO OF MINITRACK FACILITIES IN CLILE
Period *Obligations*
09/21/1962-10/15/1994 FY94: \$1,832,000 TOTAL: \$90,579,268
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E DIAZ GSFC/W J BODIN 99-Multi-Discip
GSFC/D SPINTMAN

GREAT BRITAIN

NAGW 3909 **Imperial College of Science & Technology** **8824**
NAGW-3909/B IMPERIAL COLLEGE 'DEV. OF METHODS FOR
PREDICT. LARGE CRACK GROWTH.' 12-MO AWARD
Period *Obligations*
04/22/1994-04/14/1995 FY94: \$40,200 TOTAL: \$40,200
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H FORD ARC/K GUPTA 41-Aero Engr
C E TURNER
R T FENNER

NAGW 3871 **University of Manchester** **8827**
UNIV MANCHESTER: INSTABILITY AND TRANSITION OF FLOW AT,
AND NEAR, AN ATTACHMENT LINE - INCLUDING CONTR
Period *Obligations*
02/25/1994-02/28/1995 FY94: \$64,971 TOTAL: \$64,971
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D I POLL LARC/F S COLLIER JR. 41-Aero Engr

NAGW 2127 **University of Wales** **8828**
A MORE EFFICIENT FINITE ELEMENT ALGORITHM FOR HIGH SPEED
COMPRESSIBLE FLOW
Period *Obligations*
06/15/1990-04/30/1995 FY94: \$85,000 TOTAL: \$339,400
Prin. Invest. *NASA Tech. Officer* *CASE Category*
O C ZIENKIEWICZ ARC/K K GUPTA 41-Aero Engr
ARC/K L PETERSEN

NAGW 2962 **University of Wales** **8829**
UNSTRUCTURED GRID METHODS FOR SIMULATION OF 3D TRA
NSIENT
Period *Obligations*
03/03/1992-12/31/1993 FY94: \$0 TOTAL: \$73,279
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K MORGAN ARC/K K GUPTA 41-Aero Engr
O C ZIENKIEWICZ ARC/K L PETERSEN

NAGW 3290 **University of Wales** **8830**
NAGW-3290/UNIV OF WALES/FINITE ELMEENT METHODS FOR THE
SIMULATION OF HYPERSONIC FLOWS
Period *Obligations*
01/22/1993-12/31/1994 FY94: \$0 TOTAL: \$192,332
Prin. Invest. *NASA Tech. Officer* *CASE Category*
K MORGAN LARC/K S BEY 41-Aero Engr
J PERAIRE LARC/A R WIETING

NCCW 2 **University of Wales** **8831**
PANELS WITH SHEAR LOADING
Period *Obligations*
10/01/1981-01/31/1995 FY94: \$30,000 TOTAL: \$205,250
Prin. Invest. *NASA Tech. Officer* *CASE Category*
F W WILLIAMS LARC/J H STARNES 46-Mech Engr
LARC/M S ANDERSON

NASA'S UNIVERSITY PROGRAM **ISRAEL**

ISRAEL

NAGW 1128 **Israel Institute of Technology** **8832**
AUGMENTATION AND TRAINING OF PILOT PERCEPTUAL
Period *Obligations*
09/09/1987-09/30/1993 FY94: \$0 TOTAL: \$358,388
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D GOPHER HQ/S G HART 69-Psych, NEC
S MERHAV
R KIMCHI

NAGW 3201 **Israel Institute of Technology** **8833**
IMPROVEMENT OF METHOD FOR EXPERIMENTAL DETERMINATION FOR FLUTTER SPEED BY PARAMETER IDENTIFICATION
Period *Obligations*
09/04/1992-10/31/1993 FY94: \$0 TOTAL: \$34,153
Prin. Invest. *NASA Tech. Officer* *CASE Category*
E NISSIM ARC/M W KEHOE 41-Aero Engr
ARC/L C FRUDINGER

NCCW 45 **Israel Institute of Technology** **8834**
ADVANCED INTERACTIVE DISPLAY FORMATS FOR TERMINAL AREA AIR TRAFFIC CONTROL
Period *Obligations*
07/15/1994-09/30/1995 FY94: \$104,956 TOTAL: \$104,956
Prin. Invest. *NASA Tech. Officer* *CASE Category*
A J GRUNWALD HQ/S R ELLIS 49-Engr, NEC
ARC

NAGW 2022 **Tel-Aviv University** **8835**
MARS CLIMATE FOR PHOTOBOTAIC SYSTEM OPERATION
Period *Obligations*
04/13/1990-04/30/1994 FY94: \$10,000 TOTAL: \$92,490
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J APPELBAUM LERC/D J FLOOD 45-Elec Engr

NETHERLANDS

NAGW 2736 **Delft Univ of Technology-Netherlands** **8836**
ROLE OF GEOMETRIC IMPERFECTIONS IN THE STABILITY ANALYSIS OF THIN SHELLS
Period *Obligations*
09/19/1991-08/31/1995 FY94: \$25,000 TOTAL: \$100,001
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J ARBOCZ LARC/J H STARNES 41-Aero Engr
LARC/M P NEMETH

NEW ZEALAND

NAGW 2170 **University of Canterbury** **8837**
ALTERNATIVE MODES OF CONTROL AND VISUAL INFORMATION FOR ROTORCRAFT FLIGHT
Period *Obligations*
07/24/1990-02/28/1995 FY94: \$11,000 TOTAL: \$82,722
Prin. Invest. *NASA Tech. Officer* *CASE Category*
D OWEN ARC/W W JOHNSON 69-Psych, NEC

NAGW 4127 **University of Waikato** **8838**
MODELING VISUAL, VESTIBULAR, AND OCULOMOTOR INTERACTIONS IN SELF-MOTION - ESTIMATION
Period *Obligations*
09/02/1994-06/30/1995 FY94: \$24,198 TOTAL: \$24,198
Prin. Invest. *NASA Tech. Officer* *CASE Category*
J A PERRONE ARC/L S STONE 59-Life Sci, NEC

WEST GERMANY

NAGW 1736 **Univ Stuttgart** **8839**
HIGH POWER ARC JET
Period *Obligations*
06/02/1989-07/30/1994 FY94: \$82,100 TOTAL: \$426,500
Prin. Invest. *NASA Tech. Officer* *CASE Category*
H O SCHRADE LERC/F M CURRAN 42-Astro Engr
M A KURTZ LERC/L M CARNEY

NASW 4685 **University of Karlsruhe** **8840**
THERMOELECTRIC INFRARED DETECTORS
Period *Obligations*
11/06/1992-11/14/1993 FY94: \$110,074 TOTAL: \$262,046
Prin. Invest. *NASA Tech. Officer* *CASE Category*
V KUNDE HQ/H WRIGHT 41-Aero Engr

NASA's UNIVERSITY PROGRAM APPENDIX

CROSS-INDEX BY FIELD OF SCIENCE AND ENGINEERING

The Fields used here are specified by Amendment J, "Standard Classification of Fields of Science and Engineering," to Office of Management and Budget (OMB) Circular A-46, "Standards for Statistical Surveys." Field codes are interpreted as follows:

PHYSICAL SCIENCES	ENVIRONMENTAL SCIENCES (Terrestrial and extraterrestrial)	LIFE SCIENCES	SOCIAL SCIENCES
11 ASTRONOMY	31 ATMOSPHERIC SCIENCES	51 BIOLOGICAL SCIENCES	71 ANTHROPOLOGY
12 CHEMISTRY	32 GEOLOGICAL SCIENCES	54 ENVIRONMENTAL BIOLOGY	72 ECONOMICS
13 PHYSICS	33 OCEANOGRAPHY	55 AGRICULTURAL SCIENCES	73 HISTORY
19 PHYSICAL SCIENCES, NEC*	39 ENVIRONMENTAL SCIENCES, NEC*	56 MEDICAL SCIENCES	74 LINGUISTICS
		59 LIFE SCIENCES, NEC*	75 POLITICAL SCIENCE
			76 SOCIOLOGY
			79 SOCIAL SCIENCE, NEC*
MATHEMATICAL/COMP SCI	ENGINEERING	PSYCHOLOGY	OTHER SCIENCES**
21 MATHEMATICS	41 AERONAUTICAL	61 BIOLOGICAL	99 ALL DISCIPLINE(S)
22 COMPUTER SCIENCES	42 ASTRONAUTICAL	62 SOCIAL ASPECTS	
29 MATHEMATICAL COMPUTER SCIENCES, NEC*	43 CHEMICAL	69 PSYCHOLOGY, NEC*	
	44 CIVIL		
	45 ELECTRICAL		
	46 MECHANICAL		
	47 METALLURGY AND MATERIALS		
	49 ENGINEERING, NEC*		

* Not elsewhere classified (For interdisciplinary projects and others not listed by discipline name)
** For interdisciplinary projects which cannot be classified within any of the preceding main fields

Abbreviations used in the "Technical Officer Locations" column are discussed in the prefatory pages.

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV ALA-BIRMINGHAM	R V STACHNIK	HQ	T J WDOWIAK	NAGW 3902	1069
11	UNIV ALA-HUNTSVILLE	J P NORRIS	GSFC	W PACIESAS	NAG 5-1756	1087
11	UNIV ALA-HUNTSVILLE	J P NORRIS	GSFC	G EMSLIEO	NAG 5-2019	1088
11	UNIV ALA-HUNTSVILLE	J P NORRIS	GSFC	J J BRAINERD	NAG 5-2056	1089
11	UNIV ALA-HUNTSVILLE	J P NORRIS	GSFC	A G EMSLIE	NAG 5-2373	1090
11	UNIV ALA-HUNTSVILLE	J P NORRIS	GSFC	W S PACIESAS	NAG 5-2416	1091
11	UNIV ALA-HUNTSVILLE	J P NORRIS	GSFC	E Z MUSIELAK	NAG 5-2443	1092
11	UNIV ALA-HUNTSVILLE	R PETRE	GSFC	J A MILLER	NAG 5-2627	1093
11	UNIV ALA-HUNTSVILLE	R RAMATY	GSFC	J L HOROWITZ	NAG 5-2725	1094
11	UNIV ALA-HUNTSVILLE	J P NORRIS	GSFC	J VAN PARADIJS	NAG 5-2735	1095
11	UNIV ALA-HUNTSVILLE	N WHITE	GSFC	J M FONTENLA	NAG 8-874	1110
11	UNIV ALA-HUNTSVILLE	J M DAVIS	MSFC	P C SCHMIDTKE	NAG 8-1032	1121
11	UNIV ALA-HUNTSVILLE	J VARGAS	MSFC	Z E MUSIELAK	NAG 8-1036	1122
11	UNIV ALA-HUNTSVILLE	J M DAVIS	MSFC	Z E MUSIELAK	NAG 8-1084	1124
11	UNIV ALA-HUNTSVILLE	E J REICHMANN	MSFC	Z E MUSIELAK	NAGW 2898	1136
11	UNIV ALA-HUNTSVILLE	R STACHNIK	HQ	M ZUKIC	NAGW 2933	1138
11	UNIV ALA-HUNTSVILLE	L J KALUZIENSKI	HQ	Z E MUSIELAK	NAS 8-37106	1150
11	UNIV ALA-HUNTSVILLE	J E JOHNSON	MSFC	D G TORR	NAG 5-1643	1189
11	UNIV ALA-TUSCALOOSA	D WEST	GSFC	R J BUTA	NAG 5-1718	1190
11	UNIV ALA-TUSCALOOSA	R PETRE	GSFC	R E WHITE	NAG 5-1973	1191
11	UNIV ALA-TUSCALOOSA	R PETRE	GSFC	R E WHITE	NAG 5-2134	1192
11	UNIV ALA-TUSCALOOSA	D WEST	GSFC	W C KEEL	NAG 5-2402	1193
11	UNIV ALA-TUSCALOOSA	D WEST	GSFC	M J HENRIKSEN	NAG 5-2529	1194
11	UNIV ALA-TUSCALOOSA	R PETRE	GSFC	M J HENRIKSEN	NAG 5-2574	1195
11	UNIV ALA-TUSCALOOSA	N WHITE	GSFC	R E WHITE III	NAG 5-2703	1196
11	UNIV ALA-TUSCALOOSA	R PETRE	GSFC	W KEEL	NAG 8-228	1198
11	UNIV ALA-TUSCALOOSA	J VARGUS	MSFC	R E WHITE	NAG 5-5013	1233
11	UNIV ALASKA-FAIRBANKS	L J EARLY	GSFC	T J HALLINAN	NAGW 2735	1243
11	UNIV ALASKA-FAIRBANKS	M M MELLOTT	HQ	J D CRAVEN	NCA 5-112	1260
11	UNIV ALASKA-FAIRBANKS	G H TROFFORD	GSFC	J MILLER	NAG 5-481	1283
11	ARIZONA STATE UNIV	D K WEST	GSFC	S G STARRFIELD	NAG 5-547	1284
11	ARIZONA STATE UNIV	Y KONDO	GSFC	D BURSTEIN	NAG 5-996	1285
11	ARIZONA STATE UNIV	D K WEST	GSFC	A P COWLEY		

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	ARIZONA STATE UNIV	D WEST	GSFC	P A AANNESTAD	NAG 5-1743	1286
11	ARIZONA STATE UNIV	D WEST	GSFC	S G STARRFIELD	NAG 5-1802	1287
11	ARIZONA STATE UNIV	R PETRE	GSFC	A P COWLEY	NAG 5-1976	1288
11	ARIZONA STATE UNIV	D WEST	GSFC	P C SCHMIDTKE	NAG 5-2101	1289
11	ARIZONA STATE UNIV	R PETRE	GSFC	J J HESTER	NAG 5-2211	1290
11	ARIZONA STATE UNIV	R PETRE	GSFC	R A WINDHORST	NAG 5-2322	1291
11	ARIZONA STATE UNIV	R PETRE	GSFC	A P CONWAY	NAG 5-2553	1292
11	ARIZONA STATE UNIV	J VARGAS	MSFC	P C SCHMIDTKE	NAG 8-1035	1293
11	ARIZONA STATE UNIV	H C BRINTON	HQ	S WYCKOFF	NAGW 547	1297
11	ARIZONA STATE UNIV	G S KUTTER	HQ	S G STARRFIELD	NAGW 2628	1315
11	ARIZONA STATE UNIV	L J CAROFF	HQ	L M ZIURYS	NAGW 2989	1317
11	ARIZONA STATE UNIV	M KICZA	HQ	P CHRISTENSEN	NAGW 3923	1323
11	ARIZONA STATE UNIV	P ROGERS	HQ	S WYCKOFF	NAGW 4105	1325
11	NORTHERN ARIZONA U	B W GUENTHER	GSFC	R L WILDEY	NAG 5-1761	1338
11	NORTHERN ARIZONA U	S GOLDSTEIN	JSC	H O HOOPER	NAG 9-518	1340
11	NORTHERN ARIZONA U	W L QUAIDE	HQ	B L LUTZ	NAGW 2811	1343
11	NORTHERN ARIZONA U	J H RAHE	HQ	C GRIFFITH	NAGW 3847	1345
11	NORTHERN ARIZONA U	E T SCHWARTZ	HQ	B L LUTZ	NGT 00-010-015	1347
11	UNIV OF ARIZONA	C D LAUGHLIN	ARC	H P LARSON	NAG 2-206	1355
11	UNIV OF ARIZONA	C D LAUGHLIN	ARC	D M HUNTEN	NAG 2-901	1361
11	UNIV OF ARIZONA	Y KONDO	GSFC	J B HOLBERT	NAG 5-434	1372
11	UNIV OF ARIZONA	D WEST	GSFC	M V SYKES	NAG 5-1370	1374
11	UNIV OF ARIZONA	R PETRE	GSFC	R M CUTRI	NAG 5-1711	1378
11	UNIV OF ARIZONA	R PETRE	GSFC	C D IMPEY	NAG 5-1867	1380
11	UNIV OF ARIZONA	R PETRE	GSFC	J BECHTOLD	NAG 5-2080	1381
11	UNIV OF ARIZONA	R OLIVERSEN	GSFC	R W TWEEDY	NAG 5-2268	1384
11	UNIV OF ARIZONA	R OLIVERSEN	GSFC	J B HOLBERG	NAG 5-2269	1385
11	UNIV OF ARIZONA	R OLIVERSEN	GSFC	J B HOLBERG	NAG 5-2311	1387
11	UNIV OF ARIZONA	J I TROMBKA	GSFC	W V BOYNTON	NAG 5-2367	1388
11	UNIV OF ARIZONA	B D SEERY	GSFC	A MARATHAY	NAG 5-2427	1390
11	UNIV OF ARIZONA	D WEST	GSFC	J BECHTOLD	NAG 5-2428	1391
11	UNIV OF ARIZONA	J P NORRIS	GSFC	P A PINTO	NAG 5-2435	1392
11	UNIV OF ARIZONA	R PETRE	GSFC	R C KENNICUTT JR.	NAG 5-2480	1394
11	UNIV OF ARIZONA	D WEST	GSFC	R TWEEDY	NAG 5-2502	1395
11	UNIV OF ARIZONA	J P NORRIS	GSFC	J G LAROS	NAG 5-2503	1396
11	UNIV OF ARIZONA	P PETRE	GSFC	J M HILL	NAG 5-2535	1397
11	UNIV OF ARIZONA	R OLIVERSEN	GSFC	F L HERBERT	NAG 5-2630	1398
11	UNIV OF ARIZONA	D WEST	GSFC	E W OLSZEWSKI	NAG 5-2642	1399
11	UNIV OF ARIZONA	H C BRINTON	HQ	S M LARSON	NAGW 247	1411
11	UNIV OF ARIZONA	H C BRINTON	HQ	T GEHRELS	NAGW 887	1414
11	UNIV OF ARIZONA	H C BRINTON	HQ	R S MCMILLAN	NAGW 1283	1421
11	UNIV OF ARIZONA	F C GILLET	HQ	E YOUNG	NAGW 1285	1422
11	UNIV OF ARIZONA	J T BERGSTRALH	HQ	F HERBERT	NAGW 1498	1425
11	UNIV OF ARIZONA	J H RAHE	HQ	U FINK	NAGW 1549	1426
11	UNIV OF ARIZONA	J H RAHE	HQ	W B HUBBARD	NAGW 1555	1427
11	UNIV OF ARIZONA	J RAHE	HQ	C C PORCO	NAGW 1876	1429
11	UNIV OF ARIZONA	G S LEVY	HQ	F J LOW	NAGW 1927	1431
11	UNIV OF ARIZONA	J BERGSTRALH	HQ	L A LEBOSKY	NAGW 1975	1433
11	UNIV OF ARIZONA	J BERGSTRALH	HQ	R YELLE	NAGW 2017	1434
11	UNIV OF ARIZONA	G S KUTTER	HQ	A S BURROWS	NAGW 2145	1436
11	UNIV OF ARIZONA	W L QUAIDE	HQ	L A LEBOSKY	NAGW 2301	1446
11	UNIV OF ARIZONA	J BERGSTRALH	HQ	A L BROADFOOT	NAGW 2359	1451
11	UNIV OF ARIZONA	G S KUTTER	HQ	D ARNETT	NAGW 2450	1455
11	UNIV OF ARIZONA	J T BERGSTRALH	HQ	S W BOUGHER	NAGW 2493	1456
11	UNIV OF ARIZONA	J A NUTH	HQ	G H RIEKE	NAGW 2606	1459
11	UNIV OF ARIZONA	G R RIEGLER	HQ	F MELIA	NAGW 2709	1460
11	UNIV OF ARIZONA	F GIOVANE	HQ	HOLBERG	NAGW 2720	1461
11	UNIV OF ARIZONA	W L QUAIDE	HQ	U FINK	NAGW 2761	1462
11	UNIV OF ARIZONA	W L QUAIDE	HQ	D M HUNTEN	NAGW 2772	1463
11	UNIV OF ARIZONA	G R RIEGLER	HQ	F MELIA	NAGW 2822	1464

NASA'S UNIVERSITY PROGRAM

APPENDIX 1 CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV OF ARIZONA	W L QUAIDE	HQ	D M HUNTEN	NAGW 2831	1465
11	UNIV OF ARIZONA	L J CAROFF	HQ	R I THOMPSON	NAGW 2850	1466
11	UNIV OF ARIZONA	L J CAROFF	HQ	G RIEKE	NAGW 2864	1467
11	UNIV OF ARIZONA	J L RAHE	HQ	R MCMILLAN	NAGW 2878	1468
11	UNIV OF ARIZONA	G R RIEGLER	HQ	T FLEMING	NAGW 3160	1473
11	UNIV OF ARIZONA	L LAPIANA	HQ	J B HOLBERG	NAGW 3263	1476
11	UNIV OF ARIZONA	J H RAHE	HQ	T GEHRELS	NAGW 3380	1480
11	UNIV OF ARIZONA	H C BRINTON	HQ	A L SPRAGUE	NAGW 3382	1481
11	UNIV OF ARIZONA	RAHE	HQ	T GEHRELS	NAGW 3796	1501
11	UNIV OF ARIZONA	H H BRINTON	HQ	D BRITT	NAGW 3820	1502
11	UNIV OF ARIZONA	R V STACHNIK	HQ	M P LESSER	NAGW 3846	1503
11	UNIV OF ARIZONA	J H RAHE	HQ	S LARSON	NAGW 4066	1505
11	UNIV OF ARIZONA	J RAHE	HQ	W HUBBARD	NAGW 4072	1506
11	UNIV OF ARIZONA	L J CAROFF	HQ	C K WALKER	NAGW 4074	1507
11	UNIV OF ARIZONA	P ROGERS	HQ	G RIEKE	NAGW 4083	1508
11	UNIV OF ARIZONA	C D LAUGHLIN	ARC	M RIEKE	NAS 2-13464	1514
11	UNIV OF ARIZONA	D K WEST	GSFC	M V SYKES	NAS 5-32495	1519
11	UNIV OF ARIZONA	J B POLLACK	ARC	H J MELOSH	NCA 2-822	1523
11	UNIV OF ARIZONA	J H GOEBEL	ARC	R S MCMILLAN	NCC 2-667	1525
11	UNIV OF ARIZONA	S A SANDFORD	ARC	T D SWINDLE	NCC 2-5051	1526
11	UNIV OF ARIZONA	D V GALLAWAY	HQ	L A LEBOSKY	NGT 00-010-001	1528
11	UNIV OF ARIZONA	F C OWENS	HQ	R NARAYAN	NGT 00-050-582	1537
11	UNIV OF ARIZONA	G SOFFEN	GSFC	R GREEN	NGT 00-050-758	1544
11	UNIV OF ARIZONA	F C OWENS	HQ	H J MELOSH	NGT 00-050-796	1546
11	UNIV OF ARIZONA	F C OWENS	HQ	M RIEKE	NGT 00-050-857	1547
11	UNIV OF ARIZONA	J ALEXANDER	HQ	B SANDEL	NGT 00-050-962	1549
11	UNIV OF ARIZONA	D HOLLAND	HQ	J I LUNINE	NGT 00-051-127	1554
11	UNIV OF ARIZONA	D HOLLAND	HQ	E H LEVY	NGT 00-051-139	1555
11	UNIV OF ARIZONA	D HOLLAND	HQ	C D IMPEY	NGT 00-051-152	1556
11	UNIV OF ARIZONA	D HOLLAND	HQ	W A BOYNTON	NGT 00-051-289	1559
11	UNIV OF ARIZONA	D HOLLAND	HQ	F MELIA	NGT 00-051-305	1561
11	UNIV OF ARIZONA	D HOLLAND	HQ	G RIEKE	NGT 00-051-306	1562
11	UNIV OF ARIZONA	D HOLLAND	HQ	U FINK	NGT 00-051-324	1563
11	UNIV OF ARIZONA	D HOLLAND	HQ	H J MELOSH	NGT 00-051-327	1564
11	UNIV OF ARIZONA	D HOLLAND	HQ	C WALKER	NGT 00-051-328	1565
11	HARDING UNIVERSITY	N F SIX	MSFC	J MACKEY	NAG 8-197	1572
11	CALIF INST OF TECH	C D LAUGHLIN	ARC	J ZMUDZINAS	NAG 2-744	1589
11	CALIF INST OF TECH	C D LAUGHLIN	ARC	B T SOIFER	NAG 2-857	1591
11	CALIF INST OF TECH	J P NORRIS	GSFC	T A PRINCE	NAG 5-1458	1593
11	CALIF INST OF TECH	R PETRE	GSFC	S R KULKARNI	NAG 5-1583	1594
11	CALIF INST OF TECH	S SOBIESKI	GSFC	J A WESTPHAL	NAG 5-1611	1595
11	CALIF INST OF TECH	R PETRE	GSFC	T A PRINCE	NAG 5-1687	1596
11	CALIF INST OF TECH	R PETRE	GSFC	W L SARGENT	NAG 5-1707	1597
11	CALIF INST OF TECH	D WEST	GSFC	G NEUGEBAUER	NAG 5-1710	1598
11	CALIF INST OF TECH	R PETRE	GSFC	T M HECKMAN	NAG 5-1861	1599
11	CALIF INST OF TECH	R PETRE	GSFC	T J PEARSON	NAG 5-1934	1600
11	CALIF INST OF TECH	R PETRE	GSFC	I N REID	NAG 5-1985	1601
11	CALIF INST OF TECH	J P NORRIS	GSFC	J M GRUNSFELD	NAG 5-2008	1602
11	CALIF INST OF TECH	J P NORRIS	GSFC	H ZIRIN	NAG 5-2090	1603
11	CALIF INST OF TECH	R PETRE	GSFC	S C UNWIN	NAG 5-2167	1604
11	CALIF INST OF TECH	R STRICTMATTER	GSFC	R A MEWOLDT	NAG 5-2168	1605
11	CALIF INST OF TECH	R PETRE	GSFC	R D BLANDFORD	NAG 5-2177	1606
11	CALIF INST OF TECH	D E SMITH	GSFC	D O MUHLEMAN	NAG 5-2184	1607
11	CALIF INST OF TECH	R PETRE	GSFC	M SCHMIDT	NAG 5-2193	1608
11	CALIF INST OF TECH	D WEST	GSFC	G NEUGEBAUER	NAG 5-2381	1609
11	CALIF INST OF TECH	R PETRE	GSFC	J LIM	NAG 5-2450	1610
11	CALIF INST OF TECH	R PETRE	GSFC	A LAOR	NAG 5-2496	1611
11	CALIF INST OF TECH	J P NORRIS	GSFC	R BLANDFORD	NAG 5-2504	1612
11	CALIF INST OF TECH	N WHITE	GSFC	B R KULKARNI	NAG 5-2519	1613
11	CALIF INST OF TECH	N WHITE	GSFC	T A PRINCE	NAG 5-2520	1614

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	CALIF INST OF TECH	D WEST	GSFC	S R KULKARNI	NAG 5-2655	1615
11	CALIF INST OF TECH	D WEST	GSFC	T G PHILLIPS	NAG 5-2656	1616
11	CALIF INST OF TECH	D WEST	GSFC	L ARMUS	NAG 5-2657	1617
11	CALIF INST OF TECH	J P NORRIS	GSFC	L BILDSTEN	NAG 5-2666	1618
11	CALIF INST OF TECH	R PETRE	GSFC	T HANUTTON	NAG 5-2674	1619
11	CALIF INST OF TECH	F C GILLET	HQ	T G PHILLIPS	NAGW 107	1626
11	CALIF INST OF TECH	J H RAHE	HQ	D O MUHLEMAN	NAGW 1448	1629
11	CALIF INST OF TECH	G S LEVY	HQ	A I SARGENT	NAGW 1478	1630
11	CALIF INST OF TECH	J H RAHE	HQ	D O MUHLEMAN	NAGW 1499	1631
11	CALIF INST OF TECH	J T BERGSTRAHL	HQ	Y L YUNG	NAGW 1509	1632
11	CALIF INST OF TECH	W V JONES	HQ	E C STONE	NAGW 1919	1634
11	CALIF INST OF TECH	J T BERGSTRAHL	HQ	A P INGERSOLL	NAGW 1956	1637
11	CALIF INST OF TECH	G S KUTTER	HQ	B T SOIFER	NAGW 2144	1639
11	CALIF INST OF TECH	J A NUTH	HQ	A I SARGENT	NAGW 2196	1640
11	CALIF INST OF TECH	G S KUTTER	HQ	R D BLANDFORD	NAGW 2372	1647
11	CALIF INST OF TECH	G S KUTTER	HQ	E S PHINNEY	NAGW 2394	1648
11	CALIF INST OF TECH	L J CAROFF	HQ	G A BLAKE	NAGW 2813	1656
11	CALIF INST OF TECH	L J CAROFF	HQ	R D BLANDFORD	NAGW 2816	1657
11	CALIF INST OF TECH	R V STACHNIK	HQ	K S THORNE	NAGW 2897	1658
11	CALIF INST OF TECH	L J KALUZIENSKI	HQ	R D BLANDFORD	NAGW 2920	1659
11	CALIF INST OF TECH	H C BRINTON	HQ	A I SARGENT	NAGW 3140	1665
11	CALIF INST OF TECH	G R RIEGLER	HQ	S KULKARNI	NAGW 3253	1668
11	CALIF INST OF TECH	H C BRINTON	HQ	E SARABYN	NAGW 3303	1670
11	CALIF INST OF TECH	J H RAHE	HQ	G NEUGEBAUER	NAGW 4011	1683
11	CALIF INST OF TECH	P ROGERS	HQ	A SARGENT	NAGW 4030	1685
11	CALIF INST OF TECH	R ALEMAN	GSFC	C MARTIN	NAS 5-38097	1692
11	CALIF INST OF TECH	J H RAHE	HQ	E STONE	NCCW 62	1693
11	CALIF INST OF TECH	F C OWENS	HQ	T A PRINCE	NGT 00-050-804	1700
11	CALIF INST OF TECH	J ALEXANDER	HQ	K G LIBBRECHT	NGT 00-050-818	1701
11	CALIF INST OF TECH	H ASHKENAS	JPL	B C MURRAY	NGT 00-050-891	1703
11	CALIF INST OF TECH	D HOLLAND	HQ	D STEVENSON	NGT 00-051-071	1705
11	CAL STATE U-L ANGLES	B L WHITE	HQ	H BOUSSALIS	NAGW 4103	1754
11	CAL STATE U-NRTHRIDGE	W J WAGNER	HQ	G A CHAPMAN	NAGW 3017	1759
11	CLAREMONT MCKENNA C	J P NORRIS	GSFC	J C HIGDON	NAG 5-2010	1767
11	CYPRESS COLLEGE	F SIX	MSFC	J CATANZARITE	NAG 8-998	1768
11	SAN DIEGO STATE UNIV	R PETRE	GSFC	A W SHAFTER	NAG 5-2064	1781
11	SAN FRAN STATE UNIV	J K ALEXANDER	HQ	G W MARCY	NAGW 3182	1790
11	SAN FRAN STATE UNIV	J B POLLACK	ARC	T L ROUSH	NCC 2-815	1800
11	SAN JOSE STATE UNIV	L E LASHER	ARC	A B RAGENT	NAG 2-681	1805
11	SAN JOSE STATE UNIV	J I TROMBKA	GSFC	P ENGLERT	NAG 5-2354	1808
11	SAN JOSE STATE UNIV	P CASSEN	ARC	L TOMLEY	NCA 2-735	1820
11	SAN JOSE STATE UNIV	R E YOUNG	ARC	A BRIDGER	NCA 2-784	1825
11	SAN JOSE STATE UNIV	R E YOUNG	ARC	A BRIDGER	NCA 2-785	1826
11	SAN JOSE STATE UNIV	R M HABERLE	ARC	A F BRIDGER	NCA 2-814	1828
11	SAN JOSE STATE UNIV	A BARNES	ARC	P HAMILL	NCC 2-687	1842
11	SAN JOSE STATE UNIV	P CASSEN	ARC	P HAMILL	NCC 2-5060	1852
11	SONOMA STATE UNIV	D WEST	GSFC	G G SPEAR	NAG 5-1621	1874
11	SONOMA STATE UNIV	R PETRE	GSFC	L R COMINSKY	NAG 5-1684	1875
11	SONOMA STATE UNIV	J P NORRIS	GSFC	L R COMINSKY	NAG 5-2032	1876
11	STANFORD UNIVERSITY	J N CUZZI	ARC	G L TYLER	NAG 2-673	1885
11	STANFORD UNIVERSITY	J N CUZZI	ARC	G L TYLER	NAG 2-894	1894
11	STANFORD UNIVERSITY	R C HARTMAN	GSFC	P MICHELSON	NAG 5-1605	1905
11	STANFORD UNIVERSITY	J P NORRIS	GSFC	V PETROSIAN	NAG 5-2036	1906
11	STANFORD UNIVERSITY	J P NORRIA	GSFC	R W ROMANI	NAG 5-2037	1907
11	STANFORD UNIVERSITY	R PETRE	GSFC	R ROMANI	NAG 5-2706	1909
11	STANFORD UNIVERSITY	D E NOEVER	MSFC	M KASEVICH	NAG 8-1088	1911
11	STANFORD UNIVERSITY	J T BERGSTRAHL	HQ	V R ESHLEMAN	NAGW 1971	1920
11	STANFORD UNIVERSITY	L J KALUZIENSKI	HQ	R ROMANI	NAGW 2963	1933
11	STANFORD UNIVERSITY	G R RIEGLER	HQ	V PETROSIAN	NAGW 3223	1935
11	STANFORD UNIVERSITY	L J KALUZIENSKI	HQ	P F MICHELSON	NAGW 3489	1938

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	U CAL-SYS AT BERKLEY	F J GIOVANE	HQ	H W SIEGMUND	NAGW 2567	2050
11	UNIV CALIF-BERKELEY	L C HAUGHNEY	ARC	C H TOWNES	NAG 2-208	2052
11	UNIV CALIF-BERKELEY	C D LAUGHLIN	ARC	R J SAYKALLY	NAG 2-858	2056
11	UNIV CALIF-BERKELEY	D WEST	GSFC	C HEILES	NAG 5-1230	2063
11	UNIV CALIF-BERKELEY	J MATHER	GSFC	G F SMOOT	NAG 5-1318	2064
11	UNIV CALIF-BERKELEY	D WEST	GSFC	J SILK	NAG 5-1360	2065
11	UNIV CALIF-BERKELEY	J P NORRIS	GSFC	K C HURLEY	NAG 5-1559	2068
11	UNIV CALIF-BERKELEY	J P NORRIS	GSFC	K C HURLEV	NAG 5-1560	2069
11	UNIV CALIF-BERKELEY	S SOBIESKI	GSFC	I KING	NAG 5-1607	2070
11	UNIV CALIF-BERKELEY	B TEEGARDEN	GSFC	K C HURLEY	NAG 5-1640	2071
11	UNIV CALIF-BERKELEY	R PETRE	GSFC	K C HURLEY	NAG 5-1727	2072
11	UNIV CALIF-BERKELEY	R PETRE	GSFC	H SPINRAD	NAG 5-1818	2073
11	UNIV CALIF-BERKELEY	R PETRE	GSFC	K C HURLEY	NAG 5-1851	2074
11	UNIV CALIF-BERKELEY	R PETRE	GSFC	S KAHN	NAG 5-1892	2075
11	UNIV CALIF-BERKELEY	R PETRE	GSFC	CARONE	NAG 5-1988	2076
11	UNIV CALIF-BERKELEY	D WEST	GSFC	R D TRIPP	NAG 5-2009	2077
11	UNIV CALIF-BERKELEY	J P NORRIS	GSFC	COHEN	NAG 5-2015	2078
11	UNIV CALIF-BERKELEY	D WEST	GSFC	J I SILK	NAG 5-2020	2079
11	UNIV CALIF-BERKELEY	J P NORRIS	GSFC	A V FILIPPENKO	NAG 5-2067	2080
11	UNIV CALIF-BERKELEY	R PETRE	GSFC	J R GRAHAM	NAG 5-2088	2081
11	UNIV CALIF-BERKELEY	R PETRE	GSFC	C S BOWYER	NAG 5-2135	2082
11	UNIV CALIF-BERKELEY	D WEST	GSFC	H SPINRAD	NAG 5-2182	2083
11	UNIV CALIF-BERKELEY	R PETRE	HQ	M DAVIS	NAG 5-2195	2084
11	UNIV CALIF-BERKELEY	R PETRE	GSFC	O H SIEGMUND	NAG 5-2304	2085
11	UNIV CALIF-BERKELEY	G SONNEBORN	GSFC	R P LIN	NAG 5-2351	2086
11	UNIV CALIF-BERKELEY	J NORRIS	GSFC	S M KAHN	NAG 5-2378	2087
11	UNIV CALIF-BERKELEY	R OLIVERSEN	GSFC	S M KAHN	NAG 5-2395	2088
11	UNIV CALIF-BERKELEY	D WEST	GSFC	C S BOWYER	NAG 5-2405	2089
11	UNIV CALIF-BERKELEY	R OLIVERSEN	GSFC	D C BACKER	NAG 5-2430	2090
11	UNIV CALIF-BERKELEY	J P NORRIS	GSFC	J SILK	NAG 5-2438	2091
11	UNIV CALIF-BERKELEY	D WEST	GSFC	S BOWYER	NAG 5-2452	2092
11	UNIV CALIF-BERKELEY	M MUMMA	GSFC	O SIEGMUND	NAG 5-2516	2093
11	UNIV CALIF-BERKELEY	D WEST	GSFC	R F MALINA	NAG 5-2555	2094
11	UNIV CALIF-BERKELEY	G SONNEBORN	GSFC	K C HURLEY	NAG 5-2575	2095
11	UNIV CALIF-BERKELEY	R OLIVERSEN	GSFC	S KHAN	NAG 5-2586	2096
11	UNIV CALIF-BERKELEY	N WHITE	GSFC	H SPINRAD	NAG 5-2619	2097
11	UNIV CALIF-BERKELEY	D WEST	GSFC	J DUPUIS	NAG 5-2620	2098
11	UNIV CALIF-BERKELEY	R OLIVERSEN	GSFC	M HURWITZ	NAG 5-2623	2099
11	UNIV CALIF-BERKELEY	R OLIVERSEN	GSFC	M MATHIODAKIS	NAG 5-2624	2100
11	UNIV CALIF-BERKELEY	R OLIVERSEN	GSFC	R LIEU	NAG 5-2625	2101
11	UNIV CALIF-BERKELEY	R OLIVERSEN	GSFC	R P LIN	NAG 5-2635	2102
11	UNIV CALIF-BERKELEY	B J TEEGARDEN	GSFC	O H SIEGMUND	NAG 5-2641	2104
11	UNIV CALIF-BERKELEY	R J OLIVERSEN	GSFC	J J DRAKE	NAG 5-2683	2105
11	UNIV CALIF-BERKELEY	R OLLVERSEN	GSFC	F S MOZER	NAG 5-2718	2106
11	UNIV CALIF-BERKELEY	D FAIRFIELD	GSFC	O H SIEGMUND	NAGW 1290	2110
11	UNIV CALIF-BERKELEY	G C CLAYTON	HQ	P L RICHARDS	NAGW 1352	2111
11	UNIV CALIF-BERKELEY	F C GILLET	HQ	A E LANGE	NAGW 1597	2113
11	UNIV CALIF-BERKELEY	F C GILLET	HQ	J SILK	NAGW 1860	2116
11	UNIV CALIF-BERKELEY	G S LEVY	HQ	O SIEGMUND	NAGW 2029	2118
11	UNIV CALIF-BERKELEY	G CLAYTON	HQ	B SADOBLET	NAGW 2115	2120
11	UNIV CALIF-BERKELEY	L J KALUZIENSKI	HQ	J ARONS	NAGW 2413	2122
11	UNIV CALIF-BERKELEY	G S KUTTER	HQ	D S FINLEY	NAGW 2478	2124
11	UNIV CALIF-BERKELEY	G S KUTTER	HQ	S M KAHN	NAGW 2592	2126
11	UNIV CALIF-BERKELEY	G S KUTTER	HQ	S M KAHN	NAGW 2688	2128
11	UNIV CALIF-BERKELEY	L J KALUZIENSKI	HQ	C S BUNYER	NAGW 2701	2129
11	UNIV CALIF-BERKELEY	E J WEILER	HQ	C S BOWYER	NAGW 2722	2130
11	UNIV CALIF-BERKELEY	J D RUMMEL	HQ	W WELCH	NAGW 2804	2132
11	UNIV CALIF-BERKELEY	J A NUTH	HQ	H SPINRAD	NAGW 2883	2133
11	UNIV CALIF-BERKELEY	H C BRINTON	HQ	P S MARCUS	NAGW 2986	2134
11	UNIV CALIF-BERKELEY	W L QUAIDE	HQ	R J SAYKALLY	NAGW 2991	2135
11	UNIV CALIF-BERKELEY	L J CAROFF	HQ			

NASA'S UNIVERSITY PROGRAM

APPENDIX F - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV CALIF-BERKELEY	L J KALUZIENSKI	HQ	R I KLEIN	NAGW 3027	2137
11	UNIV CALIF-BERKELEY	R STACHNIK	HQ	C S BOWYER	NAGW 3123	2139
11	UNIV CALIF-BERKELEY	L LAPIANA	HQ	M COHEN	NAGW 3154	2140
11	UNIV CALIF-BERKELEY	G R RIEGLER	HQ	M COHEN	NAGW 3267	2141
11	UNIV CALIF-BERKELEY	L S LAPIANA	HQ	B SADOULET	NAGW 3314	2142
11	UNIV CALIF-BERKELEY	R V STACHNIK	HQ	O H SIEGMUND	NAGW 3639	2148
11	UNIV CALIF-BERKELEY	R V STACHNIK	HQ	C S BOWYER	NAGW 3664	2149
11	UNIV CALIF-BERKELEY	L J KALUZIENSKI	HQ	P B SADOULET	NAGW 3802	2151
11	UNIV CALIF-BERKELEY	L J KALUZIENSKI	HQ	R P LIN	NAGW 3816	2152
11	UNIV CALIF-BERKELEY	R V STACHNIK	HQ	O H SIEGMUND	NAGW 3819	2153
11	UNIV CALIF-BERKELEY	R V STACHNIK	HQ	M L LAMPTON	NAGW 3823	2154
11	UNIV CALIF-BERKELEY	R V STACHNIK	HQ	J I SILK	NAGW 3827	2155
11	UNIV CALIF-BERKELEY	R A MULKEY	HQ	B Y WELSH	NAGW 3845	2156
11	UNIV CALIF-BERKELEY	J H RAHE	HQ	C W CARLSON	NAGW 3885	2158
11	UNIV CALIF-BERKELEY	L J CAROFF	HQ	I DE PATER	NAGW 3917	2159
11	UNIV CALIF-BERKELEY	L S LAPIANA	HQ	A E LANGE	NAGW 4095	2162
11	UNIV CALIF-BERKELEY	A J MILLER	GSFC	C F MCKEE	NAGW 4111	2163
11	UNIV CALIF-BERKELEY	A SMITH	GSFC	R MALINA	NAS 5-29298	2165
11	UNIV CALIF-BERKELEY	A G TIELENS	ARC	D HUNTEN	NAS 5-30180	2166
11	UNIV CALIF-BERKELEY	A G TIELENS	ARC	C MCKEE	NCA 2-637	2175
11	UNIV CALIF-BERKELEY	J B POLLACK	ARC	I DE PATER	NCA 2-678	2176
11	UNIV CALIF-BERKELEY	A TIELENS	ARC	C S BOWYER	NCA 2-763	2178
11	UNIV CALIF-BERKELEY	F C WITTENBORN	ARC	C MCKEE	NCA 2-826	2180
11	UNIV CALIF-BERKELEY	D J HOLLENBACH	ARC	C E HEILES	NCC 2-142	2183
11	UNIV CALIF-BERKELEY	A G TIELENS	ARC	F H SHU	NCC 2-548	2185
11	UNIV CALIF-BERKELEY	L J EARLY	ARC	I DE PATER	NCC 2-5083	2191
11	UNIV CALIF-BERKELEY	J ALEXANDER	GSFC	C S BOWYER	NGR 5-3450	2195
11	UNIV CALIF-BERKELEY	D HOLLAND	HQ	H SPINRAD	NGT 00-050-921	2217
11	UNIV CALIF-BERKELEY	D HOLLAND	HQ	J R GRAHAM	NGT 00-051-082	2222
11	UNIV CALIF-DAVIS	R PETRE	GSFC	F H SHU	NGT 00-051-191	2223
11	UNIV CALIF-DAVIS	R PETRE	GSFC	R H BECKER	NAG 5-1759	2246
11	UNIV CALIF-DAVIS	J P NORRIS	GSFC	R H BECKER	NAG 5-1876	2247
11	UNIV CALIF-DAVIS	D WEST	GSFC	R H BECKER	NAG 5-2421	2248
11	UNIV CALIF-DAVIS	H C BRINTON	GSFC	R H BECKER	NAG 5-2433	2249
11	UNIV CALIF-L ANGELES	R O FIMMEL	HQ	W M JACKSON	NAGW 1144	2255
11	UNIV CALIF-L ANGELES	L E LASHER	ARC	R J STRANGWAY	NAG 2-485	2349
11	UNIV CALIF-L ANGELES	C D LAUGHLIN	ARC	C RUSSELL	NAG 2-501	2350
11	UNIV CALIF-L ANGELES	A I POLAND	ARC	M R MORRIS	NAG 2-799	2352
11	UNIV CALIF-L ANGELES	J MATHER	GSFC	R K ULRICH	NAG 5-1166	2370
11	UNIV CALIF-L ANGELES	D WEST	GSFC	E L WRIGHT	NAG 5-1309	2372
11	UNIV CALIF-L ANGELES	R PETRE	GSFC	M A MALKAN	NAG 5-1358	2373
11	UNIV CALIF-L ANGELES	D WEST	GSFC	M A MALKAN	NAG 5-1719	2378
11	UNIV CALIF-L ANGELES	D WEST	GSFC	L H ALLER	NAG 5-1799	2379
11	UNIV CALIF-L ANGELES	A SMITH	GSFC	M A MALKAN	NAG 5-2140	2382
11	UNIV CALIF-L ANGELES	J P NORRIS	GSFC	M A JURA	NAG 5-2178	2383
11	UNIV CALIF-L ANGELES	D WEST	GSFC	M A MALKIN	NAG 5-2417	2386
11	UNIV CALIF-L ANGELES	F C GILLET	GSFC	M J PLAVEC	NAG 5-2653	2388
11	UNIV CALIF-L ANGELES	J BERGSTRAHL	HQ	M A JURA	NAGW 80	2393
11	UNIV CALIF-L ANGELES	R V STACHNIK	HQ	G SCHUBERT	NAGW 1874	2402
11	UNIV CALIF-L ANGELES	L J CAROFF	HQ	D B CLINE	NAGW 3096	2431
11	UNIV CALIF-L ANGELES	L J CAROFF	HQ	E E BECKLIN	NAGW 3115	2432
11	UNIV CALIF-L ANGELES	J CAROFF	HQ	I S MCLEAN	NAGW 3300	2435
11	UNIV CALIF-L ANGELES	H D VITAGLIANO	HQ	D B CLINE	NAGW 3993	2457
11	UNIV CALIF-L ANGELES	D CROSBY	GSFC	M JURA	NAS 5-29363	2465
11	UNIV CALIF-L ANGELES	J K ALEXANDER	GSFC	C T RUSSELL	NAS 5-30373	2466
11	UNIV CALIF-L ANGELES	D WEST	HQ	I S MCLEAN	NGT 00-050-807	2480
11	UNIV CALIF-RIVERSIDE	J P NORRIS	GSFC	M J PLAVEC	NSG-5272	2486
11	UNIV CALIF-RIVERSIDE	J P NORRIS	GSFC	T J O'NEILL	NAG 5-2027	2487
11	UNIV CALIF-RIVERSIDE	L J KALUZIENSKI	GSFC	A D ZYCH	NAG 5-2044	2488
			HQ	A ZYCH	NAGW 1996	2491

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV CALIF-SAN DIEGO	D WEST	GSFC	D E GRUBER	NAG 5-1372	2511
11	UNIV CALIF-SAN DIEGO	D WEST	GSFC	W H TUCKER	NAG 5-1499	2513
11	UNIV CALIF-SAN DIEGO	J NORRIS	GSFC	R E LINGENFELTER	NAG 5-1597	2514
11	UNIV CALIF-SAN DIEGO	S SOBIESKI	GSFC	R HARMS	NAG 5-1630	2515
11	UNIV CALIF-SAN DIEGO	A SMITH	GSFC	E BEAVER	NAG 5-1858	2516
11	UNIV CALIF-SAN DIEGO	D WEST	GSFC	Y REPHAELL	NAG 5-1868	2517
11	UNIV CALIF-SAN DIEGO	R PETRE	GSFC	R E ROTHSCHILD	NAG 5-1977	2522
11	UNIV CALIF-SAN DIEGO	D WEST	GSFC	Y REPHAELI	NAG 5-1995	2523
11	UNIV CALIF-SAN DIEGO	R PETRE	GSFC	R D COHEN	NAG 5-2059	2524
11	UNIV CALIF-SAN DIEGO	D WEST	GSFC	R D COHEN	NAG 5-2127	2525
11	UNIV CALIF-SAN DIEGO	R PETRE	GSFC	Y REPHAELI	NAG 5-2197	2526
11	UNIV CALIF-SAN DIEGO	J P NORRIS	GSFC	Y REPHAELI	NAG 5-2236	2527
11	UNIV CALIF-SAN DIEGO	J I TROMBKA	GSFC	J R ARNOLD	NAG 5-2333	2528
11	UNIV CALIF-SAN DIEGO	N WHITE	GSFC	D GRUBER	NAG 5-2479	2529
11	UNIV CALIF-SAN DIEGO	N WHITE	GSFC	R D COHEN	NAG 5-2517	2530
11	UNIV CALIF-SAN DIEGO	L J KALUZIENSKI	HQ	J L MATTESON	NAGW 449	2539
11	UNIV CALIF-SAN DIEGO	J T BERGSTRALH	HQ	D A MENDIS	NAGW 1502	2544
11	UNIV CALIF-SAN DIEGO	L J KALUZIENSKI	HQ	R E LINGENFELTER	NAGW 1970	2548
11	UNIV CALIF-SAN DIEGO	G S KUTTER	HQ	A M WOLFE	NAGW 2119	2551
11	UNIV CALIF-SAN DIEGO	W L QUAIDE	HQ	L MCFADDEN	NAGW 2849	2564
11	UNIV CALIF-SAN DIEGO	L S LAPIANA	HQ	W H TUCKER	NAGW 3247	2575
11	UNIV CALIF-SAN DIEGO	J H RAHE	HQ	B JONES	NAGW 4073	2586
11	UNIV CALIF-SAN DIEGO	W D DAVIS	GSFC	R E ROTHSCHILD	NAS 5-30720	2588
11	UNIV CALIF-SAN DIEGO	G J FISHMAN	MSFC	J L MATTESON	NAS 8-36081	2591
11	UNIV CALIF-S BARBARA	F C GILLET	HQ	P M LUBIN	NAGW 1062	2636
11	UNIV CALIF-S BARBARA	L LAPIANA	HQ	P M LUBIN	NAGW 3245	2650
11	UNIV CALIF-S BARBARA	L J CAROFF	HQ	P M LUBIN	NAGW 4051	2655
11	UNIV CALIF-S CRUZ	C D LAUGHLIN	ARC	D M RANK	NAG 2-813	2672
11	UNIV CALIF-S CRUZ	D WEST	GSFC	G H SMITH	NAG 5-1767	2673
11	UNIV CALIF-S CRUZ	J P NORRIS	GSFC	M HERANT	NAG 5-2073	2674
11	UNIV CALIF-S CRUZ	K M JAHODA	GSFC	J R PRIMACK	NAG 5-2262	2675
11	UNIV CALIF-S CRUZ	M E NEIN	MSFC	G D ILLINGWORTH	NAG 8-932	2676
11	UNIV CALIF-S CRUZ	G S KUTTER	HQ	L E HERNQUIST	NAGW 2422	2678
11	UNIV CALIF-S CRUZ	G S KUTTER	HQ	S E WOOSLEY	NAGW 2525	2679
11	UNIV CALIF-S CRUZ	L J CAROFF	HQ	J P BRODIE	NAGW 2965	2680
11	UNIV CALIF-S CRUZ	L J KALUZIENSKI	HQ	G R BLUMENTHAL	NAGW 3105	2681
11	UNIV CALIF-S CRUZ	P ROGERS	HQ	D LIN	NAGW 3988	2684
11	UNIV CALIF-S CRUZ	CAROFF	HQ	D KOO	NAGW 4037	2685
11	UNIV CALIF-S CRUZ	J N CUZZI	ARC	P BODENHEIMER	NCA 2-746	2687
11	UNIV CALIF-S CRUZ	B SMITH	ARC	L HERNQUIST	NCA 2-750	2688
11	UNIV CALIF-S CRUZ	J D BREGMAN	ARC	D M RANK	NCA 2-777	2689
11	UNIV CALIF-S CRUZ	J B POLLACK	ARC	P H BODENHEIMER	NCA 2-803	2690
11	UNIV CALIF-S CRUZ	D J HOLLENBACH	ARC	P H BODENHEIMER	NCC 2-649	2692
11	UNIV CALIF-S CRUZ	E W DUNHAM	ARC	D M RANK	NCC 2-744	2694
11	UNIV CALIF-S CRUZ	B SMITH	ARC	L HERNQUIST	NCC 2-5005	2696
11	UNIV CALIF-S CRUZ	J BREGMAN	ARC	D R RANK	NCC 2-5013	2697
11	UNIV CALIF-S CRUZ	J B POLLACK	ARC	P BODENHEIMER	NCC 2-5044	2698
11	UNIV CALIF-S CRUZ	F C OWENS	HQ	D LIN	NGT 00-050-665	2699
11	UNIV CALIF-S CRUZ	F C OWENS	HQ	L HERNQUIST	NGT 00-050-855	2700
11	UNIV CALIF-S CRUZ	G BADHWAR	JSC	E V BENTON	NAG 9-727	2708
11	UNIV OF SOUTHERN CAL	D WEST	GSFC	G J PETERS	NAG 5-1296	2719
11	UNIV OF SOUTHERN CAL	J FISCHER	GSFC	E RHODES	NAG 5-2219	2720
11	UNIV OF SOUTHERN CAL	R OLIVERSON	GSFC	G J PETERS	NAG 5-2292	2721
11	UNIV OF SOUTHERN CAL	R OLIVERSEN	GSFC	G J PETERS	NAG 5-2313	2722
11	UNIV OF SOUTHERN CAL	J BERGSTRALH	HQ	D L JUDGE	NAGW 1924	2727
11	UNIV OF SOUTHERN CAL	W L QUAIDE	HQ	D E SHEMANSKY	NAGW 2834	2732
11	UNIV OF SOUTHERN CAL	E C WHIPPLE	HQ	M GRUNTMAN	NAGW 3520	2738
11	UNIV OF SOUTHERN CAL	D WEST	GSFC	G J PETERS	NSG-5422	2758
11	UNIV OF SOUTHERN CAL	L E LASHER	ARC	A I STEWART	NAG 2-504	2823
11	UNIV COLORADO-BOLDR	C D LAUGHLIN	ARC	A L BETZ	NAG 2-753	2824

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV COLORADO-BOLDR	L E LASHER	ARC	L W ESPOSITO	NAG 2-861	2828
11	UNIV COLORADO-BOLDR	A G TIELENS	ARC	T P SNOW	NAG 2-916	2830
11	UNIV COLORADO-BOLDR	D WEST	GSFC	J M SHULL	NAG 5-193	2844
11	UNIV COLORADO-BOLDR	D WEST	GSFC	T R AYRES	NAG 5-199	2845
11	UNIV COLORADO-BOLDR	D WEST	GSFC	E W BRUGAL	NAG 5-350	2846
11	UNIV COLORADO-BOLDR	Y KONDO	GSFC	A BROWN	NAG 5-985	2849
11	UNIV COLORADO-BOLDR	D WEST	GSFC	T R AYRES	NAG 5-1215	2851
11	UNIV COLORADO-BOLDR	D WEST	GSFC	J M SHULL	NAG 5-1224	2852
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	G A DULK	NAG 5-1526	2856
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	F BAGENAL	NAG 5-1589	2857
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	J L LINSKY	NAG 5-1666	2858
11	UNIV COLORADO-BOLDR	D WEST	GSFC	I R LITTLE-MARENIN	NAG 5-1667	2859
11	UNIV COLORADO-BOLDR	D WEST	GSFC	G C CLAYTON	NAG 5-1672	2860
11	UNIV COLORADO-BOLDR	D WEST	GSFC	T P SNOW	NAG 5-1701	2861
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	T R AYRES	NAG 5-1791	2863
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	A R BROWN	NAG 5-1792	2864
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	T P SNOW	NAG 5-1796	2865
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	R E STENCEL	NAG 5-1798	2866
11	UNIV COLORADO-BOLDR	D WEST	GSFC	R E STENCEL	NAG 5-1832	2867
11	UNIV COLORADO-BOLDR	A SMITH	GSFC	J C BRANDT	NAG 5-1853	2868
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	J T STOCKE	NAG 5-1857	2869
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	Q WANG	NAG 5-1879	2870
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	J L LINSKY	NAG 5-1887	2871
11	UNIV COLORADO-BOLDR	D WEST	GSFC	P S CONTI	NAG 5-1956	2874
11	UNIV COLORADO-BOLDR	D WEST	GSFC	Q WANG	NAG 5-2014	2875
11	UNIV COLORADO-BOLDR	J P NORRIS	GSFC	M C BEGELMAN	NAG 5-2026	2876
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	J LINSKY	NAG 5-2075	2877
11	UNIV COLORADO-BOLDR	D WEST	GSFC	J M SHULL	NAG 5-2122	2878
11	UNIV COLORADO-BOLDR	D WEST	GSFC	G C CLAYTON	NAG 5-2143	2879
11	UNIV COLORADO-BOLDR	D WEST	GSFC	P S CONTI	NAG 5-2147	2880
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	A HAMILTON	NAG 5-2151	2881
11	UNIV COLORADO-BOLDR	D WEST	GSFC	J L LINSKY	NAG 5-2161	2882
11	UNIV COLORADO-BOLDR	R OLIVERSEN	GSFC	A BROWN	NAG 5-2259	2884
11	UNIV COLORADO-BOLDR	R OLIVERSEN	GSFC	T R AYRES	NAG 5-2274	2885
11	UNIV COLORADO-BOLDR	R OLIVERSON	GSFC	J C GREEN	NAG 5-2283	2886
11	UNIV COLORADO-BOLDR	R OLIVERSEN	GSFC	T P SNOW	NAG 5-2319	2888
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	M GUEDEL	NAG 5-2372	2891
11	UNIV COLORADO-BOLDR	D WEST	GSFC	J BALLY	NAG 5-2383	2892
11	UNIV COLORADO-BOLDR	D WEST	GSFC	P S CONTI	NAG 5-2387	2893
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	T R AYRES	NAG 5-2451	2894
11	UNIV COLORADO-BOLDR	D WEST	GSFC	J C GREEN	NAG 5-2469	2895
11	UNIV COLORADO-BOLDR	D WEST	GSFC	G S BURKS	NAG 5-2470	2896
11	UNIV COLORADO-BOLDR	J P NORRIS	GSFC	J M SHULL	NAG 5-2514	2897
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	R A MCCRAY	NAG 5-2525	2898
11	UNIV COLORADO-BOLDR	N WHITE	GSFC	A BROWN	NAG 5-2530	2899
11	UNIV COLORADO-BOLDR	B CAMPBELL	GSFC	S C SOLOMON	NAG 5-2576	2902
11	UNIV COLORADO-BOLDR	N WHITE	GSFC	M BEGELMAN	NAG 5-2592	2906
11	UNIV COLORADO-BOLDR	R OLIVERSEN	GSFC	C D GARMANY	NAG 5-2596	2907
11	UNIV COLORADO-BOLDR	D WEST	GSFC	I R LITTLE-MARENIN	NAG 5-2597	2908
11	UNIV COLORADO-BOLDR	D WEST	GSFC	C GARMANY	NAG 5-2610	2909
11	UNIV COLORADO-BOLDR	R PETRE	GSFC	E ELLINGSON	NAG 5-2616	2910
11	UNIV COLORADO-BOLDR	J A SLAVIN	GSFC	D N BAKER	NAG 5-2633	2911
11	UNIV COLORADO-BOLDR	J A SLAVIN	GSFC	D N BAKER	NAG 5-2634	2912
11	UNIV COLORADO-BOLDR	F SIX	MSFC	T SNOW	NAG 8-1091	2928
11	UNIV COLORADO-BOLDR	G C CLAYTON	HQ	J M SCHULL	NAGW 766	2934
11	UNIV COLORADO-BOLDR	J H RAHE	HQ	J C BRANDT	NAGW 1387	2942
11	UNIV COLORADO-BOLDR	L J KALUZIENSKI	HQ	J M SHULL	NAGW 1479	2945
11	UNIV COLORADO-BOLDR	J WEISS	HQ	E W BRUGEL	NAGW 1902	2949
11	UNIV COLORADO-BOLDR	J T BERGSTRAHL	HQ	S R LEONE	NAGW 2438	2963
11	UNIV COLORADO-BOLDR	W QUAIDE	HQ	N M SCHNEIDER	NAGW 2484	2964

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV COLORADO-BOLDR	J H RAHE	HQ	N M SCNEIDER	NAGW 2492	2966
11	UNIV COLORADO-BOLDR	G S KUTTER	HQ	J T STOCKE	NAGW 2675	2970
11	UNIV COLORADO-BOLDR	R STACHNIK	HQ	R MCCRAY	NAGW 2900	2980
11	UNIV COLORADO-BOLDR	R STACHNIK	HQ	A BROWN	NAGW 2904	2981
11	UNIV COLORADO-BOLDR	L J CAROFF	HQ	A L BETZ	NAGW 2954	2983
11	UNIV COLORADO-BOLDR	W L QUAIDE	HQ	R T CLANCY	NAGW 2995	2989
11	UNIV COLORADO-BOLDR	L J KALUZIENSKI	HQ	M C BEGELMAN	NAGW 3016	2990
11	UNIV COLORADO-BOLDR	L J CAROFF	HQ	R E STENCEL	NAGW 3177	2994
11	UNIV COLORADO-BOLDR	G R RIEGLER	HQ	E BRUGEL	NAGW 3192	2995
11	UNIV COLORADO-BOLDR	J D RUMMEL	HQ	A L BETZ	NAGW 3196	2996
11	UNIV COLORADO-BOLDR	L S LAPIANA	HQ	T R AYRES	NAGW 3284	3000
11	UNIV COLORADO-BOLDR	H R MILLER	HQ	M C BEGELMAN	NAGW 3554	3007
11	UNIV COLORADO-BOLDR	R STACHNIK	HQ	J C GREEN	NAGW 3593	3009
11	UNIV COLORADO-BOLDR	C MORROW	HQ	J BENNETT	NAGW 3667	3012
11	UNIV COLORADO-BOLDR	R V STACHNIK	HQ	M C BEGELMAN	NAGW 3838	3015
11	UNIV COLORADO-BOLDR	R A MULKEY	HQ	A HAMILTON	NAGW 3898	3018
11	UNIV COLORADO-BOLDR	P ROGERS	HQ	M HORANYI	NAGW 4082	3024
11	UNIV COLORADO-BOLDR	R J OLIVERSON	GSFC	B DOMIK	NAS 5-31860	3032
11	UNIV COLORADO-BOLDR	J ALEXANDER	HQ	P S CONTI	NGT 00-050-809	3078
11	UNIV COLORADO-BOLDR	F C OWENS	HQ	W C CASH	NGT 00-050-813	3079
11	UNIV COLORADO-BOLDR	D HOLLAND	HQ	N M SCHNEIDER	NGT 00-051-091	3094
11	UNIV COLORADO-BOLDR	D HOLLAND	HQ	J GREEN	NGT 00-051-283	3104
11	UNIV COLORADO-BOLDR	D HOLLAND	HQ	J STOCKE	NGT 00-051-291	3105
11	UNIV COLORADO-BOLDR	M MOORE	ARC	D H GRINSPOON	NGT 00-051-294	3106
11	UNIV COLORADO-BOLDR	D WEST	GSFC	T P SNOW JR	NSG-5300	3115
11	UNIV COLORADO-BOLDR	L J EARLY	GSFC	T P SNOW JR.	NSG-5303	3116
11	UNIV OF DENVER	R PETRE	HQ	R E STENCEL	NAG 5-2094	3124
11	UNIV OF DENVER	D WEST	GSFC	R E STENCEL	NAG 5-2103	3125
11	UNIV OF DENVER	K G CARPENTER	GSFC	R E STENCEL	NAG 5-2368	3126
11	UNIV OF DENVER	L J CAROFF	HQ	R E STENCEL	NAGW 3680	3127
11	UNIV OF DENVER	R GOLDBERG	GSFC	F WHITE	NAS 5-29311	3128
11	UNIV OF DENVER	D HOLLAND	HQ	R E STENCEL	NGT 00-051-290	3132
11	UNIV STHN COLORADO	R PETRE	GSFC	T P SNOW	NAG 5-1457	3135
11	YALE UNIVERSITY	R PETRE	GSFC	C D BAILYN	NAG 5-1619	3159
11	YALE UNIVERSITY	G S KUTTER	HQ	C BAILYN	NAGW 2469	3162
11	YALE UNIVERSITY	G S KUTTER	HQ	P DEMARQUE	NAGW 2531	3163
11	YALE UNIVERSITY	R STACHNIK	HQ	A OEMLER	NAGW 3563	3164
11	YALE UNIVERSITY	L J CAROFF	HQ	D E PROBER	NAGW 3879	3165
11	YALE UNIVERSITY	F C OWENS	HQ	S SOFIA	NGT 00-050-651	3171
11	DELAWARE STATE COL	C R CHAPPELL	MSFC	P DIMARIC	NAG 8-248	3180
11	UNIV OF DELAWARE	R PETRO	GSFC	H SHIPMAN	NAG 5-1654	3184
11	UNIV OF DELAWARE	R OLIVERSEN	GSFC	H L SHIPMAN	NAG 5-2365	3185
11	UNIV OF DELAWARE	D WEST	GSFC	H L SHIPMAN	NAG 5-2512	3186
11	UNIV OF DELAWARE	R OLIVERSEN	GSFC	H L SHIPMAN	NAG 5-2598	3187
11	UNIV OF DELAWARE	G S KUTTER	HQ	S P CWOCKI	NAGW 2624	3193
11	UNIV OF DELAWARE	J ALEXANDER	HQ	S P OWOCKI	NGT 00-050-806	3202
11	CATHOLIC UNIVERSITY	D K WEST	GSFC	F C BRUHWEILER	NAG 5-296	3256
11	CATHOLIC UNIVERSITY	D WEST	GSFC	F C BRUHWEILER	NAG 5-1353	3258
11	CATHOLIC UNIVERSITY	A SMITH	GSFC	F C BRUHWEILER	NAG 5-1413	3259
11	CATHOLIC UNIVERSITY	A M SMITH	GSFC	C H LYU	NAG 5-1414	3260
11	CATHOLIC UNIVERSITY	R PETRE	GSFC	F BRUHWEILER	NAG 5-1580	3262
11	CATHOLIC UNIVERSITY	D WEST	GSFC	F BRUHWEILER	NAG 5-1783	3263
11	CATHOLIC UNIVERSITY	R S POLIDAN	GSFC	F C BRUHWEILER	NAG 5-2057	3264
11	CATHOLIC UNIVERSITY	R O LIVERSON	GSFC	F C BRUHWEILER	NAG 5-2284	3266
11	CATHOLIC UNIVERSITY	L ORWIG	GSFC	C WERNITZ	NSG-5066	3271
11	ECKERD COLLEGE	M H MOORE	GSFC	R L HUDSON	NAG 5-1843	3279
11	FLA INTERNATIONAL U	F SIX	MSFC	N MUNROE	NAG 8-283	3286
11	FLORIDA INST OF TECH	F SIX	MSFC	J D PATTERSON	NAG 8-195	3317
11	UNIV OF FLORIDA	D WEST	GSFC	S F DERMOTT	NAG 5-2654	3411
11	UNIV OF FLORIDA	F SIX	MSFC	R E WILSON	NAG 8-245	3413

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV OF FLORIDA	F SIX	MSFC	S T GOTTESMAN	NAG 8-1092	3416
11	UNIV OF FLORIDA	F HORZ	JSC	S F DERMOTT	NAG 9-630	3418
11	UNIV OF FLORIDA	J T BERGSTRALH	HQ	B GUSTAFSON	NAGW 2482	3421
11	UNIV OF FLORIDA	L J CAROFF	HQ	M T VALA	NAGW 2957	3424
11	UNIV OF FLORIDA	L S LAPIANA	HQ	S F DERMOTT	NAGW 3237	3425
11	UNIV OF FLORIDA	J RAHE	HQ	T CARR	NAGW 4015	3428
11	UNIV OF FLORIDA	J ALEXANDER	HQ	J H HUNTER	NGT 00-050-805	3446
11	UNIV OF FLORIDA	F C OWENS	HQ	R E WILSON	NGT 00-050-815	3447
11	UNIV OF FLORIDA	J K ALEXANDER	HQ	H CAMPINS	NGT 00-050-959	3448
11	UNIV OF FLORIDA	D K RUSSELL	HQ	T D CARR	NGT 00-070-332	3453
11	GEORGIA INST OF TECH	D H BROCKER	ARC	P G STEFFES	NAG 2-700	3532
11	GEORGIA INST OF TECH	F C OWENS	HQ	W L CHAMEIDES	NGT 00-050-765	3588
11	GEORGIA STATE UNIV	D WEST	GSFC	W BAGNUOLO	NAG 5-1994	3620
11	GEORGIA STATE UNIV	D WEST	GSFC	GIES	NAG 5-2148	3621
11	GEORGIA STATE UNIV	D WEST	GSFC	W G BAGNUOLO	NAG 5-2488	3622
11	UNIV OF GEORGIA		GSFC	J P CAILLAULT	NAG 5-1608	3641
11	UNIV OF GEORGIA	R PETRE	GSFC	J P CAILLAULT	NAG 5-1610	3642
11	UNIV OF GEORGIA	R PETRE	GSFC	J S SHAW	NAG 5-2095	3643
11	UNIV OF GEORGIA	D WEST	GSFC	L MAGNANI	NAG 5-2409	3644
11	UNIV OF GEORGIA	D WEST		L MAGNANI	NAG 5-2665	3645
11	UNIV OF GEORGIA	C R CHAPPELL	MSFC	J S SHAW	NAG 8-148	3646
11	UNIV OF GEORGIA	L J CAROFF	HQ	J CAILLAULT	NAGW 3469	3648
11	UNIV OF HAWAII-MANOA	D WEST	GSFC	T SIMON	NAG 5-146	3655
11	UNIV OF HAWAII-MANOA	J P NORRIS	GSFC	R C CANFIELD	NAG 5-1574	3657
11	UNIV OF HAWAII-MANOA	R PETRE	GSFC	J P HENRY	NAG 5-1685	3658
11	UNIV OF HAWAII-MANOA	D WEST	GSFC	D B SANDERS	NAG 5-1741	3659
11	UNIV OF HAWAII-MANOA	R PETRE	GSFC	R B TULLY	NAG 5-1752	3660
11	UNIV OF HAWAII-MANOA	R PETRE	GSFC	J P HENRY	NAG 5-1789	3661
11	UNIV OF HAWAII-MANOA	R PETRE	GSFC	J P HENRY	NAG 5-1880	3663
11	UNIV OF HAWAII-MANOA	R PETRE	GSFC	L L COWIE	NAG 5-1928	3664
11	UNIV OF HAWAII-MANOA	D WEST	GSFC	J P HENRY	NAG 5-1996	3665
11	UNIV OF HAWAII-MANOA	R PETRE	GSFC	T SIMON	NAG 5-2022	3666
11	UNIV OF HAWAII-MANOA	R PETRE	GSFC	K C CHAMBERS	NAG 5-2132	3667
11	UNIV OF HAWAII-MANOA	D WEST	GSFC	T SIMON	NAG 5-2150	3668
11	UNIV OF HAWAII-MANOA	R OLIVERSEN	GSFC	T SIMON	NAG 5-2275	3669
11	UNIV OF HAWAII-MANOA	N WHITE	GSFC	J P HENRY	NAG 5-2523	3671
11	UNIV OF HAWAII-MANOA	R PETRE	GSFC	I GIOIA	NAG 5-2594	3672
11	UNIV OF HAWAII-MANOA	R OLIVERSEN	GSFC	D C JEWITT	NAG 5-2631	3674
11	UNIV OF HAWAII-MANOA	V KUNDE	GSFC	T OWEN	NAG 5-2663	3675
11	UNIV OF HAWAII-MANOA	D WEST	GSFC	C WYNN-WILLIAMS	NAG 5-2675	3676
11	UNIV OF HAWAII-MANOA	F SIX	MSFC	W D HEACOX	NAG 8-994	3679
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	W J BELL	NAGW 802	3686
11	UNIV OF HAWAII-MANOA	F C GILLET	HQ	L L COWIE	NAGW 959	3688
11	UNIV OF HAWAII-MANOA	J RAHE	HQ	K J MEECH	NAGW 1897	3695
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	D B HALL	NAGW 1916	3696
11	UNIV OF HAWAII-MANOA	J H RAHE	HQ	D J THOLEN	NAGW 1991	3698
11	UNIV OF HAWAII-MANOA	L KALUZIENSKI	HQ	B A SMITH	NAGW 2463	3702
11	UNIV OF HAWAII-MANOA	J RAHE	HQ	T OWEN	NAGW 2650	3706
11	UNIV OF HAWAII-MANOA	W L QUAIDE	HQ	D C JEWITT	NAGW 2917	3707
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	D J THOLEN	NAGW 3044	3710
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	D J THOLEN	NAGW 3093	3711
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	B SMITH	NAGW 3099	3712
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	P G LUCEY	NAGW 3409	3717
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	P LUCEY	NAGW 3427	3718
11	UNIV OF HAWAII-MANOA	W J WAGNER	HQ	D BRAUN	NAGW 3548	3723
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	D HALL	NAGW 3643	3724
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	P LUCEY	NAGW 3712	3726
11	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	B SMITH	NAGW 3818	3730
11	UNIV OF HAWAII-MANOA	J H RAHE	HQ	K MEECH	NAGW 3844	3731
11	UNIV OF HAWAII-MANOA	J H RAHE	HQ	D HALL	NAGW 3875	3732

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV OF HAWAII-MANOA	J RAHE	HQ	D JEWITT	NAGW 3900	3733
11	UNIV OF HAWAII-MANOA	L J CAROFF	HQ	D B SANDERS	NAGW 3938	3735
11	UNIV OF HAWAII-MANOA	J H RAHE	HQ	D JEWITT	NAGW 3973	3736
11	UNIV OF HAWAII-MANOA	J F MCGARRY	GSFC	L MACKNIK	NAS 5-30535	3741
11	UNIV OF HAWAII-MANOA	J RAHE	HQ	D B HALL	NASW 4481	3745
11	UNIV OF HAWAII-MANOA	J ALEXANDER	HQ	J P HENRY	NGT 00-050-811	3752
11	UNIV OF HAWAII-MANOA	D HOLLAND	HQ	B LABONTE	NGT 00-051-124	3754
11	UNIV OF HAWAII-MANOA	D HOLLAND	HQ	B J LABONTE	NGT 00-051-286	3755
11	UNIV OF HAWAII-MANOA	D HOLLAND	HQ	D JEWITT	NGT 00-051-325	3756
11	IDAHO STATE UNIV.	F SIX	MSFC	S JOHNSON	NAG 8-269	3758
11	UNIV OF IDAHO	J B POLLACK	ARC	D H ATKINSON	NCA 2-794	3760
11	NORTHWESTERN UNIV	R PETRE	GSFC	D M MEYER	NAG 5-1779	3789
11	NORTHWESTERN UNIV	D WEST	GSFC	D M MAYER	NAG 5-1801	3790
11	NORTHWESTERN UNIV	D WEST	GSFC	F YUSEF-ZADEH	NAG 5-2105	3793
11	NORTHWESTERN UNIV	D WEST	GSFC	M ULMER	NAG 5-2432	3795
11	NORTHWESTERN UNIV	D WEST	GSFC	D WANG	NAG 5-2716	3796
11	NORTHWESTERN UNIV	R PETRE	GSFC	Q WANG	NAG 5-2717	3797
11	NORTHWESTERN UNIV	G S KUTTER	HQ	R E TAAM	NAGW 2526	3804
11	NORTHWESTERN UNIV	J K ALEXANDER	HQ	J B KETTERSON	NAGW 2859	3806
11	NORTHWESTERN UNIV	L J KALUZIENSKI	HQ	G S MILLER	NAGW 2935	3807
11	NORTHWESTERN UNIV	R STACHNIK	HQ	L S FINN	NAGW 2936	3808
11	UNIV OF CHICAGO	G BULLOCK	GSFC	J A SIMPSON	NAG 5-706	3839
11	UNIV OF CHICAGO	D WEST	GSFC	D E WELTY	NAG 5-1434	3841
11	UNIV OF CHICAGO	J P NORRIS	GSFC	D Q LAMB	NAG 5-1454	3842
11	UNIV OF CHICAGO	J P NORRIS	GSFC	D Q LAMB	NAG 5-1757	3844
11	UNIV OF CHICAGO	R PETRE	GSFC	R ROSNER	NAG 5-1856	3845
11	UNIV OF CHICAGO	J P NORRIS	GSFC	J W TRURAN	NAG 5-2081	3847
11	UNIV OF CHICAGO	J P NORRIS	GSFC	P COPPI	NAG 5-2099	3848
11	UNIV OF CHICAGO	D WEST	GSFC	A KONIGI	NAG 5-2265	3850
11	UNIV OF CHICAGO	J C MATHER	GSFC	S S MEYER	NAG 5-2474	3852
11	UNIV OF CHICAGO	R F SILVERBERG	GSFC	S MEYER	NAG 5-2626	3853
11	UNIV OF CHICAGO	J P NORRIS	GSFC	J M QUASHNOCK	NAG 5-2660	3854
11	UNIV OF CHICAGO	J P NORRIS	GSFC	D Q LAMB	NAG 5-2687	3855
11	UNIV OF CHICAGO	I D BROWNE	JSC	R N CLAYTON	NAG 9-51	3859
11	UNIV OF CHICAGO	L J KALUZIENSKI	HQ	D Q LAMB JR	NAGW 830	3862
11	UNIV OF CHICAGO	G C CLAYTON	HQ	D N SCHRAMM	NAGW 1321	3864
11	UNIV OF CHICAGO	L J KALUZIENSKI	HQ	A KONIGL	NAGW 1636	3868
11	UNIV OF CHICAGO	G S KUTTER	HQ	A KOENIGL	NAGW 2379	3877
11	UNIV OF CHICAGO	W V JONES	HQ	P C FRISCH	NAGW 2610	3880
11	UNIV OF CHICAGO	L S LAPIANA	HQ	D A HARPER	NAGW 2959	3881
11	UNIV OF CHICAGO	L J CAROFF	HQ	R H HILDEBRAND	NAGW 3057	3882
11	UNIV OF CHICAGO	L S LAPIANA	HQ	D A HARPER	NAGW 3252	3887
11	UNIV OF CHICAGO	R O WALES	GSFC	J A SIMPSON	NAS 5-30117	3899
11	UNIV OF CHICAGO	B F SMITH	ARC	R H MILLER	NCC 2-265	3900
11	UNIV OF CHICAGO	C D LAUGHLIN	ARC	D A HARPER JR	NGR14-1227	3902
11	UNIV OF CHICAGO	F C OWENS	HQ	A KONIGL	NGT 00-050-529	3904
11	UNIV OF CHICAGO	F C OWENS	HQ	D Q LAMB	NGT 00-050-778	3906
11	UNIV OF CHICAGO	M MOORE	ARC	R H HILDEBRAND	NGT 00-050-894	3908
11	UNIV OF CHICAGO	D HOLLAND	HQ	D Q LAMB	NGT 00-051-059	3911
11	UNIV OF CHICAGO	D HOLLAND	HQ	S MEYER	NGT 00-051-157	3914
11	UNIV OF CHICAGO	M MOORE	ARC	R HILDEBRAND	NGT 00-051-311	3916
11	UNIV OF CHICAGO	L C HAUGHNEY	ARC	R H HILDEBRAND	NSG-2057	3919
11	UNIV ILLINOIS-URBANA	D WEST	GSFC	J B KALER	NAG 5-1400	3959
11	UNIV ILLINOIS-URBANA	J NORRIS	GSFC	J W TRURAN	NAG 5-1565	3960
11	UNIV ILLINOIS-URBANA	R PETRE	GSFC	Y H CHU	NAG 5-1900	3962
11	UNIV ILLINOIS-URBANA	R PETRE	GSFC	J R DICKEL	NAG 5-2018	3963
11	UNIV ILLINOIS-URBANA	D WEST	GSFC	Y H CHU	NAG 5-2112	3965
11	UNIV ILLINOIS-URBANA	R PETRE	GSFC	M MACLOW	NAG 5-2245	3968
11	UNIV ILLINOIS-URBANA	J R FISCHER	GSFC	D BALSARA	NAG 5-2667	3970
11	UNIV ILLINOIS-URBANA	D WEST	GSFC	Y H CHU	NAG 5-2679	3971

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV ILLINOIS-URBANA	F C GILLET	HQ	W D WATSON	NAGW 1104	3975
11	UNIV ILLINOIS-URBANA	H C BRINTON	HQ	L E SNYDER	NAGW 1131	3976
11	UNIV ILLINOIS-URBANA	L J KALUZIENSKI	HQ	F K LAMB	NAGW 1583	3977
11	UNIV ILLINOIS-URBANA	G S KUTTER	HQ	J W TRURAN	NAGW 2421	3980
11	UNIV ILLINOIS-URBANA	R V STACHNIK	HQ	R F WEBBINK	NAGW 2996	3983
11	BALL STATE UNIVERSTY	D WEST	GSFC	R H KAITCHUCK	NAG 5-2501	4010
11	INDIANA U-BLOOMINGTN	J N CUZZI	ARC	R H DURISEN	NAG 2-762	4020
11	INDIANA U-BLOOMINGTN	B G BILLS	GSFC	M W HAMBURGER	NAG 5-1941	4022
11	INDIANA U-BLOOMINGTN	D WEST	GSFC	H R JOHNSON	NAG 5-2106	4023
11	INDIANA U-BLOOMINGTN	G S KUTTER	HQ	H N COHN	NAGW 2400	4026
11	INDIANA U-BLOOMINGTN	L J KALUZIENSKI	HQ	D FRIESEL	NAGW 3718	4029
11	INDIANA U-SOUTH BEND	D WEST	GSFC	S N SHORE	NAG 5-2612	4035
11	PURDUE UNIVERSITY	R OLIVERSEN	GSFC	J P FINLEY	NAG 5-2391	4067
11	PURDUE UNIVERSITY	R PETRE	GSFC	J P FINLEY	NAG 5-2492	4068
11	PURDUE UNIVERSITY	H C BRINTON	HQ	T S ZWIER	NAGW 3019	4080
11	PURDUE UNIVERSITY	H C BRINTON	HQ	M E LIPSCHUTZ	NAGW 3396	4082
11	PURDUE UNIVERSITY	G SOFFEN	GSFC	HARSHVARDHAN	NGT 00-050-963	4108
11	ROSE-HULMAN INST TEC	D GLENAR	GSFC	R WAITE	NAG 5-2176	4117
11	VALPARISO UNIV	D WEST	GSFC	B J HRIVNAK	NAG 5-1223	4140
11	VALPARISO UNIV	D WEST	GSFC	B J HRIVNAK	NAG 5-2645	4141
11	VALPARISO UNIV	F SIX	MSFC	B J HRIVNAK	NAG 8-232	4142
11	IOWA STATE UNIV	Y KONDO	GSFC	L A WILLSON	NAG 5-707	4160
11	IOWA STATE UNIV	R PETRE	GSFC	D G LUTTERMOSER	NAG 5-1655	4162
11	IOWA STATE UNIV	J P NORRIS	GSFC	R C LAMB	NAG 5-2047	4163
11	IOWA STATE UNIV	J A PEDELTY	GSFC	P N APPLETON	NAG 5-2286	4164
11	IOWA STATE UNIV	R PETRE	GSFC	P N APPLETON	NAG 5-2385	4165
11	UNIV OF IOWA	L E LASHER	ARC	J A VAN ALLEN	NAG 2-571	4187
11	UNIV OF IOWA	G BULLOCK	GSFC	L A FRANK	NAG 5-295	4190
11	UNIV OF IOWA	J P NORRIS	GSFC	R EDELSON	NAG 5-2422	4202
11	UNIV OF IOWA	D WEST	GSFC	R EDELSON	NAG 5-2521	4203
11	UNIV OF IOWA	N WHITE	GSFC	R EDELSON	NAG 5-2547	4204
11	UNIV OF IOWA	D WEST	GSFC	J D FIX	NAG 5-2668	4205
11	UNIV OF IOWA	G BULLOCK	GSFC	W KURTH	NAG 5-2669	4206
11	UNIV OF IOWA	D NOEVER	MSFC	J GOREE	NAG 8-292	4208
11	UNIV OF IOWA	F WAINSCOTT	GSFC	L A FRANK	NAG 5-26858	4224
11	UNIV OF KANSAS	G C CLAYTON	HQ	A L MELOTT	NAGW 1288	4253
11	UNIV OF KANSAS	J T BERGSTRALH	HQ	T E CRAVENS	NAGW 1588	4255
11	UNIV OF KANSAS	R V STACHNIK	HQ	A L MELOTT	NAGW 3832	4262
11	UNIV OF KANSAS	F C OWENS	HQ	A L MELOTT	NGT 00-050-816	4275
11	CENTRE COLLEGE	M J HAGYARD	MSFC	J I KINEKE	NAG 8-1042	4286
11	NORTH KENTUCKY UNIV	F SIX	MSFC	M FALBO-KENKEL	NAG 8-990	4287
11	UNIV OF KENTUCKY	G R RIEGLER	HQ	G FERLAND	NAGW 3315	4292
11	UNIV OF KENTUCKY	R V STACHNIK	HQ	I SHLOSMAN	NAGW 3839	4294
11	UNIV OF KENTUCKY	A TIELENS	ARC	G FERLAND	NCC 2-5028	4295
11	WESTRN KENTUCKY UNIV	P J SAKIMOTO	GSFC	C H MCGRUDER	NAG 5-2595	4307
11	LA ST U&A&M COL-BRGE	D WEST	GSFC	J S DRILLING	NAG 5-71	4312
11	LA ST U&A&M COL-BRGE	J P NORRIS	GSFC	R C SVOBODA	NAG 5-2062	4313
11	LA ST U&A&M COL-BRGE	D WEST	GSFC	D KOESTER	NAG 5-2113	4314
11	LA ST U&A&M COL-BRGE	R PETRE	GSFC	D KOESTER	NAG 5-2229	4315
11	LA ST U&A&M COL-BRGE	J BERGSTRALH	HQ	Y K HO	NAGW 2033	4320
11	LA ST U&A&M COL-BRGE	G S KUTTER	HQ	D G KOESTER	NAGW 2137	4322
11	LA ST U&A&M COL-BRGE	G S KUTTER	HQ	J FRANK	NAGW 2447	4323
11	LA ST U&A&M COL-BRGE	L J KALUZIENSKI	HQ	M L CHERRY	NAGW 3744	4327
11	U OF SOUTHERN MAINE	F SIX	MSFC		NAG 8-1004	4385
11	CHARLES CO COMM COL	J A NUTH	GSFC	G F KRAUSE	NAG 5-1377	4394
11	CHARLES CO COMM COL	J NUTH	GSFC	G KRAUSE	NCC 5-69	4395
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	S D FRIEDMAN	NAG 5-1119	4404
11	JOHNS HOPKINS UNIV	R PETRE	GSFC	W BLAIR	NAG 5-1537	4407
11	JOHNS HOPKINS UNIV	R PETRE	GSFC	R BURG	NAG 5-1538	4408
11	JOHNS HOPKINS UNIV	S SOBIESKI	GSFC	W G FASTIE	NAG 5-1617	4410

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	JOHNS HOPKINS UNIV	R PETRE	GSFC	G A KRISS	NAG 5-1636	4411
11	JOHNS HOPKINS UNIV	R PETRE	GSFC	T M HECKMAN	NAG 5-1638	4412
11	JOHNS HOPKINS UNIV	D WEST	GSFC	H W MOOS	NAG 5-1676	4415
11	JOHNS HOPKINS UNIV	D WEST	GSFC	H W MOOS	NAG 5-1775	4416
11	JOHNS HOPKINS UNIV	D WEST	GSFC	W P BLAIR	NAG 5-1793	4417
11	JOHNS HOPKINS UNIV	R PETRE	GSFC	G A KRISS	NAG 5-1952	4418
11	JOHNS HOPKINS UNIV	R PETRE	GSFC	W P BLAIR	NAG 5-1953	4419
11	JOHNS HOPKINS UNIV	R PETRE	GSFC	T M HECKMAN	NAG 5-1991	4420
11	JOHNS HOPKINS UNIV	J P NORRIS	GSFC	J H KROLIK	NAG 5-2052	4422
11	JOHNS HOPKINS UNIV	D WEST	GSFC	D D FELDMAN	NAG 5-2141	4424
11	JOHNS HOPKINS UNIV	R OLIVERSEN	GSFC	H W MOOS	NAG 5-2276	4428
11	JOHNS HOPKINS UNIV	R OLIVERSEN	GSFC	W P BLAIR	NAG 5-2298	4429
11	JOHNS HOPKINS UNIV	R OLIVERSEN	GSFC	J N MURTHY	NAG 5-2299	4430
11	JOHNS HOPKINS UNIV	R OLIVERSEN	GSFC	R B HENRY	NAG 5-2341	4431
11	JOHNS HOPKINS UNIV	R OLIVERSEN	GSFC	R H BUSS	NAG 5-2342	4432
11	JOHNS HOPKINS UNIV	D WEST	GSFC	D L HALL	NAG 5-2390	4433
11	JOHNS HOPKINS UNIV	D WEST	GSFC	J N MURTHY	NAG 5-2398	4434
11	JOHNS HOPKINS UNIV	D WEST	GSFC	A SZALAY	NAG 5-2399	4435
11	JOHNS HOPKINS UNIV	D WEST	GSFC	J MORTHY	NAG 5-2454	4436
11	JOHNS HOPKINS UNIV	D WEST	GSFC	R H BUSS	NAG 5-2465	4437
11	JOHNS HOPKINS UNIV	D WEST	GSFC	D T HALL	NAG 5-2466	4438
11	JOHNS HOPKINS UNIV	J P NORRIS	GSFC	J H KROLIK	NAG 5-2478	4439
11	JOHNS HOPKINS UNIV	N WHITE	GSFC	T M HECKMAN	NAG 5-2548	4440
11	JOHNS HOPKINS UNIV	R OLIVERSEN	GSFC	D T HALL	NAG 5-2622	4441
11	JOHNS HOPKINS UNIV	N WHITE	GSFC	R GRIFFITHS	NAG 5-2728	4442
11	JOHNS HOPKINS UNIV	G S KUTTER	HQ	R BURG	NAGW 2508	4455
11	JOHNS HOPKINS UNIV	J K ALEXANDER	HQ	D M RUST	NAGW 2866	4461
11	JOHNS HOPKINS UNIV	R STACHNIK	HQ	R F WYSE	NAGW 2892	4463
11	JOHNS HOPKINS UNIV	R STACHNIK	HQ	D A NEUFELD	NAGW 2910	4464
11	JOHNS HOPKINS UNIV	L J KALUZIENSKI	HQ	J H KROLIK	NAGW 3129	4469
11	JOHNS HOPKINS UNIV	G R REGLER	HQ	D NEUFELD	NAGW 3147	4470
11	JOHNS HOPKINS UNIV	G R RIEGLER	HQ	J KROLIK	NAGW 3156	4471
11	JOHNS HOPKINS UNIV	L J CAROFF	HQ	D A NEUFELD	NAGW 3183	4472
11	JOHNS HOPKINS UNIV	L S LAPIANA	HQ	J H KROLIK	NAGW 3257	4473
11	JOHNS HOPKINS UNIV	L KALUZIENSKI	HQ	R E GRIFFITHS	NAGW 3288	4474
11	JOHNS HOPKINS UNIV	R V STACHNIK	HQ	A S SZALAY	NAGW 3831	4480
11	JOHNS HOPKINS UNIV	R V STACHNIK	HQ	S CASERTANO	NAGW 3861	4481
11	JOHNS HOPKINS UNIV	E C WHIPPLE	HQ	R L MCNUTT	NAGW 3991	4482
11	JOHNS HOPKINS UNIV	D E NEW	HQ	T HECKMAN	NAGW 4025	4484
11	JOHNS HOPKINS UNIV	J H OWENS	MSFC	A DAVIDSEN	NAS 5-27000	4491
11	JOHNS HOPKINS UNIV	E F THOMAS	GSFC	W MOOS	NAS 5-31248	4493
11	JOHNS HOPKINS UNIV	L C HAUGHNEY	ARC	L G MUNDY	NAG 2-557	4534
11	UNIV MARYLAND-COL PK	L E LASHER	ARC	F B McDONALD	NAG 2-627	4535
11	UNIV MARYLAND-COL PK	C D LAUGHLIN	ARC	J E HOWE	NAG 2-856	4539
11	UNIV MARYLAND-COL PK	J C PEARL	GSFC	R K KHANNA	NAG 5-216	4547
11	UNIV MARYLAND-COL PK	D WEST	GSFC	M F A'HEARN	NAG 5-252	4548
11	UNIV MARYLAND-COL PK	G BULLOCK	GSFC	G GLOECKLER	NAG 5-705	4549
11	UNIV MARYLAND-COL PK	G BULLOCK	GSFC	F M IPAVICH	NAG 5-728	4551
11	UNIV MARYLAND-COL PK	T KOSTIUK	GSFC	J D TRASCO	NAG 5-1134	4557
11	UNIV MARYLAND-COL PK	F C JONES	GSFC	J D TRASCO	NAG 5-1176	4558
11	UNIV MARYLAND-COL PK	D WEST	GSFC	M A A'HEARN	NAG 5-1272	4559
11	UNIV MARYLAND-COL PK	N LAI	GSFC	F McDONALD	NAG 5-1299	4560
11	UNIV MARYLAND-COL PK	J P NORRIS	GSFC	M R KUNDU	NAG 5-1450	4563
11	UNIV MARYLAND-COL PK	R PETRE	GSFC	A S WILSON	NAG 5-1532	4565
11	UNIV MARYLAND-COL PK	J R HEIRTZLER	GSFC	R A BELL	NAG 5-1694	4567
11	UNIV MARYLAND-COL PK	B PUTNEY	GSFC	R A BELL	NAG 5-1695	4568
11	UNIV MARYLAND-COL PK	D WEST	GSFC	L BLITZ	NAG 5-1736	4570
11	UNIV MARYLAND-COL PK	C J CRANNELL	GSFC	M R KUNDU	NAG 5-2001	4579
11	UNIV MARYLAND-COL PK	R PETRE	GSFC	V L TRIMBLE	NAG 5-2011	4581
11	UNIV MARYLAND-COL PK	D WEST	GSFC	M F A'HEARN	NAG 5-2093	4582

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV MARYLAND-COL PK	J TUELLER	GSFC	M LEVENTHAL	NAG 5-2296	4587
11	UNIV MARYLAND-COL PK	J NORRIS	GSFC	M J ASCHWANDEN	NAG 5-2352	4591
11	UNIV MARYLAND-COL PK	R OLIVERSEN	HQ	S M WHITE	NAG 5-2364	4594
11	UNIV MARYLAND-COL PK	R OLIVERSEN	GSFC	S D VRTILEK	NAG 5-2374	4596
11	UNIV MARYLAND-COL PK	J P NORRIS	GSFC	M LEVENTHAL	NAG 5-2380	4597
11	UNIV MARYLAND-COL PK	N GAHRELS	GSFC	M LEVENTHAL	NAG 5-2386	4598
11	UNIV MARYLAND-COL PK	S S HOLT	GSFC	J D TRASKO	NAG 5-2400	4600
11	UNIV MARYLAND-COL PK	R PETRE	GSFC	S D VRTILEK	NAG 5-2429	4602
11	UNIV MARYLAND-COL PK	D WEST	GSFC	S VITILEK	NAG 5-2500	4604
11	UNIV MARYLAND-COL PK	N WHITE	GSFC	S M WHITE	NAG 5-2531	4605
11	UNIV MARYLAND-COL PK	N WHITE	GSFC	S D VRTILEK	NAG 5-2532	4606
11	UNIV MARYLAND-COL PK	R STREITMATTER	GSFC	F MCDONALD	NAG 5-2604	4608
11	UNIV MARYLAND-COL PK	R PETRE	GSFC	A WILCOX	NAG 5-2640	4609
11	UNIV MARYLAND-COL PK	D WEST	GSFC	L BLITZ	NAG 5-2676	4612
11	UNIV MARYLAND-COL PK	M E ROSENTHAL	MSFC	A S WILSON	NAG 8-1027	4613
11	UNIV MARYLAND-COL PK	H C BRINTON	HQ	M F A'HEARN	NAGW 902	4616
11	UNIV MARYLAND-COL PK	J H RAHE	HQ	M F A'HEARN	NAGW 1886	4625
11	UNIV MARYLAND-COL PK	J T BERGSTRALH	HQ	R J KHANNA	NAGW 2346	4635
11	UNIV MARYLAND-COL PK	G S KUTTER	HQ	A S WILSON	NAGW 2689	4639
11	UNIV MARYLAND-COL PK	J A KAYE	HQ	R D HUDSON	NAGW 2696	4640
11	UNIV MARYLAND-COL PK	W L QUAIDE	HQ	M F A'HEARN	NAGW 2952	4647
11	UNIV MARYLAND-COL PK	H C BRINTON	HQ	M A'HEARN	NAGW 3178	4651
11	UNIV MARYLAND-COL PK	G C BRINTON	HQ	A W GROSSMAN	NAGW 3309	4656
11	UNIV MARYLAND-COL PK	R V STACHNIK	HQ	J RICHARD	NAGW 3640	4663
11	UNIV MARYLAND-COL PK	L J KALUZIENSKI	HQ	R SAGDEEV	NAGW 3791	4668
11	UNIV MARYLAND-COL PK	J H RAHE	HQ	A GROSSMAN	NAGW 4010	4670
11	UNIV MARYLAND-COL PK	J H RAHE	HQ	L MCFADDEN	NAGW 4070	4672
11	UNIV MARYLAND-COL PK	F EINAUDI	GSFC	R D HUDSON	NCC 5-55	4693
11	UNIV MARYLAND-COL PK	S COHEN	GSFC	M SCHAEFER	NCC 5-59	4695
11	UNIV MARYLAND-COL PK	P MC CLAIN	GSFC	E C PAVLIS	NCC 5-60	4696
11	UNIV MARYLAND-COL PK	G FISHMAN	MSFC	R SAGDEEV	NCC 8-25	4697
11	UNIV MARYLAND-COL PK	G SOFFAN	GSFC	A S WILSON	NGT 00-050-764	4713
11	UNIV MARYLAND-COL PK	J ALEXANDER	HQ	R A BELL	NGT 00-050-808	4714
11	UNIV MARYLAND-COL PK	M BURRELL	GSFC	R MUSHOTZKY	NGT 00-051-096	4719
11	UNIV MARYLAND-COL PK	J T LYNCH	HQ	H R BOROSON	NGT 00-060-010	4722
11	BOSTON UNIVERSITY	C D LAUGHLIN	ARC	A P LANE	NAG 2-747	4737
11	BOSTON UNIVERSITY	J NORRIS	GSFC	A P MARSCHER	NAG 5-1566	4742
11	BOSTON UNIVERSITY	R PETRE	GSFC	A P MARSCHER	NAG 5-1943	4743
11	BOSTON UNIVERSITY	D WEST	GSFC	D P CLEMENS	NAG 5-1997	4744
11	BOSTON UNIVERSITY	J P NORRIS	GSFC	J M JACKSON	NAG 5-2028	4745
11	BOSTON UNIVERSITY	D WEST	GSFC	S CHAKRABARTI	NAG 5-2260	4747
11	BOSTON UNIVERSITY	J P NORRIS	GSFC	A P MARSCHER	NAG 5-2508	4749
11	BOSTON UNIVERSITY	D WEST	GSFC	J M JACKSON	NAG 5-2643	4751
11	BOSTON UNIVERSITY	R V STACHNIK	HQ	S CHAKRABARTI	NAGW 3059	4760
11	BOSTON UNIVERSITY	J H RAHE	HQ	M MENDILLO	NAGW 3876	4761
11	BOSTON UNIVERSITY	L J CAROFF	HQ	J M JACKSON	NAGW 4024	4764
11	BOSTON UNIVERSITY	D HOLLAND	HQ	S CHAKRABARTI	NGT 00-051-333	4769
11	COL OF HOLY CROSS	N WHITE	GSFC	R ROSS	NAG 5-2261	4777
11	HARVARD UNIVERSITY	R PETRE	GSFC	J E GRINDLAY	NAG 5-1624	4788
11	HARVARD UNIVERSITY	J P NORRIS	GSFC	J E GRINDLAY	NAG 5-1690	4789
11	HARVARD UNIVERSITY	R PETRE	GSFC	M BIRKINSHAW	NAG 5-1895	4791
11	HARVARD UNIVERSITY	J NORRIS	GSFC	R NARAYAN	NAG 5-1904	4792
11	HARVARD UNIVERSITY	J P NORRIS	GSFC	P THADDEUS	NAG 5-2076	4793
11	HARVARD UNIVERSITY	J P NORRIS	GSFC	R NARAYAN	NAG 5-2077	4794
11	HARVARD UNIVERSITY	J P NORRIS	GSFC	J E GRINDLAY	NAG 5-2243	4795
11	HARVARD UNIVERSITY	D WEST	GSFC	R P KIRSHNER	NAG 5-2305	4797
11	HARVARD UNIVERSITY	D WEST	GSFC	R KIRSHNER	NAG 5-2487	4798
11	HARVARD UNIVERSITY	J VARGAS	MSFC	J E TRINDLEY	NAG 8-1034	4800
11	HARVARD UNIVERSITY	L J KALUZIENSKI	HQ	J GRINDLAY	NAGW 624	4802
11	HARVARD UNIVERSITY	J D RUMMEL	HQ	P HOROWITZ	NAGW 2872	4814

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	HARVARD UNIVERSITY	G R RIEGLER	HQ	J GRINDLAY	NAGW 3280	4817
11	HARVARD UNIVERSITY	D WEST	GSFC	W H PARKINSON	NAS 5-32587	4824
11	HARVARD UNIVERSITY	F C OWENS	HQ	I I SHAPIRO	NGT 00-050-663	4841
11	HARVARD UNIVERSITY	F C OWENS	HQ	R KIRSHNER	NGT 00-050-802	4843
11	HARVARD UNIVERSITY	J ALEXANDER	HQ	M J GELLER	NGT 00-050-814	4844
11	HARVARD UNIVERSITY	F C OWENS	HQ	J P HOUCRA	NGT 00-050-819	4845
11	HARVARD UNIVERSITY	F C OWENS	HQ	F K THIELEMANN	NGT 00-050-851	4846
11	HARVARD UNIVERSITY	J K ALEXANDER	HQ	R P KIRSHNER	NGT 00-050-994	4849
11	HARVARD UNIVERSITY	J K ALEXANDER	HQ	R P KIRSHNER	NGT 00-051-002	4851
11	HARVARD UNIVERSITY	J LYNCH	HQ	R KIRSHNER	NGT 00-051-081	4852
11	HARVARD UNIVERSITY	M MOORE	ARC	R KIRSHNER	NGT 00-051-312	4854
11	HARVARD UNIVERSITY	D HOLLAND	HQ	M J GELLER	NGT 00-051-336	4855
11	MASS INST OF TECH	C D LAUGHLIN	ARC	J L ELLIOT	NAG 2-754	4881
11	MASS INST OF TECH	J N CUZZI	ARC	J L ELLIOT	NAG 2-855	4883
11	MASS INST OF TECH	G BULLOCK	GSFC	A J LAZARUS	NAG 5-584	4912
11	MASS INST OF TECH	J MATHER	GSFC	R WEISS	NAG 5-1314	4915
11	MASS INST OF TECH	R PETRE	GSFC	H BRADT	NAG 5-1498	4917
11	MASS INST OF TECH	R PETRE	GSFC	A M LEVINE	NAG 5-1625	4919
11	MASS INST OF TECH	R PETRE	GSFC	G W CLARK	NAG 5-1656	4920
11	MASS INST OF TECH	R PETRE	GSFC	G R RICKER	NAG 5-1682	4921
11	MASS INST OF TECH	R PETRE	GSFC	R A REMILLARD	NAG 5-1784	4923
11	MASS INST OF TECH	R PETRE	GSFC	W H LEWIN	NAG 5-1826	4924
11	MASS INST OF TECH	R PETRE	GSFC	C R CANIZARES	NAG 5-1865	4925
11	MASS INST OF TECH	R PETRE	GSFC	C R CANIZARES	NAG 5-1951	4931
11	MASS INST OF TECH	R PETRE	GSFC		NAG 5-1983	4932
11	MASS INST OF TECH	D WEST	GSFC	S RAPPAPORT	NAG 5-1993	4933
11	MASS INST OF TECH	J P NORRIS	GSFC	W H LEWIN	NAG 5-2030	4934
11	MASS INST OF TECH	J P NORRIS	GSFC	W H LEWIN	NAG 5-2046	4935
11	MASS INST OF TECH	J P NORRIS	GSFC	G R RICKER	NAG 5-2165	4936
11	MASS INST OF TECH	D E SMITH	GSFC	G H PETTENGILL	NAG 5-2185	4937
11	MASS INST OF TECH	R PETRE	GSFC	T H MARKERT	NAG 5-2230	4938
11	MASS INST OF TECH	D WEST	GSFC	K SEMBACH	NAG 5-2536	4941
11	MASS INST OF TECH	N WHITE	GSFC	G W CLARK	NAG 5-2540	4942
11	MASS INST OF TECH	N WHITE	GSFC	M W BAUTE	NAG 5-2541	4943
11	MASS INST OF TECH	N WHITE	GSFC	T H MARKERT	NAG 5-2542	4944
11	MASS INST OF TECH	R PETRE	GSFC	P JOSS	NAG 5-2632	4947
11	MASS INST OF TECH	N WHITE	GSFC	S RAPPAPORT	NAG 5-2661	4948
11	MASS INST OF TECH	N WHITE	GSFC	G RICKER	NAG 5-2685	4949
11	MASS INST OF TECH	N WHITE	GSFC	W LEWIS	NAG 5-2734	4950
11	MASS INST OF TECH	J VARGAS	MSFC	S RAPPAPORT	NAG 8-285	4952
11	MASS INST OF TECH	J VARGAS	MSFC	W H LEWIN	NAG 8-286	4953
11	MASS INST OF TECH	D HAVRISIK	MSFC	H BRADT	NAG 8-691	4955
11	MASS INST OF TECH	C PILCHER	HQ	B I BURKE	NAGW 1386	4980
11	MASS INST OF TECH	J H RAHE	HQ	R BINZEL	NAGW 1450	4981
11	MASS INST OF TECH	J H RAHE	HQ	J L ELLIOT	NAGW 1494	4982
11	MASS INST OF TECH	L J KALUZIENSKI	HQ	P C JOSS	NAGW 1545	4984
11	MASS INST OF TECH	L J KALUZIENSKI	HQ	G CLARK	NAGW 2003	4993
11	MASS INST OF TECH	L J KALUZIENSKI	HQ	G RICKER	NAGW 2089	4997
11	MASS INST OF TECH	J T BERGSTRAHL	HQ	J I STEINFELD	NAGW 2387	5005
11	MASS INST OF TECH	L J CAROFF	HQ	E BERTSCHINGER	NAGW 2807	5011
11	MASS INST OF TECH	W L QUAIDE	HQ	J L ELLIOT	NAGW 2812	5012
11	MASS INST OF TECH	W L QUAIDE	HQ	T E DOWLING	NAGW 2956	5015
11	MASS INST OF TECH	G R RIEGLER	HQ	W LEWIN	NAGW 3234	5019
11	MASS INST OF TECH	H C BRINTON	HQ	R P BINZEL	NAGW 3292	5020
11	MASS INST OF TECH	H C BRINTON	HQ	J L ELLIOT	NAGW 3296	5021
11	MASS INST OF TECH	H C BRINTON	HQ	H B HAMMEL	NAGW 3310	5022
11	MASS INST OF TECH	R V STACHNIK	HQ	D P HUENEMOERDER	NAGW 3422	5023
11	MASS INST OF TECH	J A RAHE	HQ	R BINZEL	NAGW 3901	5030
11	MASS INST OF TECH	W DAVIS	GSFC	H BRADT	NAS 5-30612	5040
11	MASS INST OF TECH	N B CUMINGS	MSFC	G RICKER	NAS 8-37716	5047

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	MASS INST OF TECH	C E WINKLER	MSFC	C R CANIZARES	NAS 8-38249	5048
11	MASS INST OF TECH	J LINTOTT	HQ	G R RICKER	NASW 4372	5052
11	MASS INST OF TECH	F C OWENS	HQ	J L ELLIOT	NGT 00-050-669	5072
11	TUFTS UNIVERSITY	R V STACHNIK	HQ	R A GONSALES	NAGW 3577	5099
11	UNIV OF MASS-AMHERST	D WEST	GSFC	R L SNELL	NAG 5-1288	5107
11	UNIV OF MASS-AMHERST	D WEST	GSFC	M WEINBERG	NAG 5-1999	5108
11	UNIV OF MASS-AMHERST	D WEST	GSFC	P F GOLDSMITH	NAG 5-2000	5109
11	UNIV OF MASS-AMHERST	J H RAHE	HQ	E F LADD	NAG 5-2713	5110
11	UNIV OF MASS-AMHERST	J H RAHE	HQ	S E STROM	NAGW 1417	5114
11	UNIV OF MASS-AMHERST	G S LEVY	HQ	F P SCHLOERB	NAGW 1483	5115
11	UNIV OF MASS-AMHERST	G R RIEGLER	HQ	S G KLEINMANN	NAGW 1935	5116
11	WELLESLEY COLLEGE	J N CUZZI	HQ	J YOUNG	NAGW 3809	5123
11	WILLIAMS COLLEGE	R PETRE	ARC	R G FRENCH	NAG 2-814	5135
11	WILLIAMS COLLEGE	L S LAPIANA	GSFC	K B KWITTER	NAG 5-1888	5139
11	MICHIGAN STATE UNIV	R PETRE	HQ	P J PASACHOFF	NAGW 3266	5140
11	MICHIGAN STATE UNIV	R J OLIVERSEN	GSFC	T C BEERS	NAG 5-2434	5169
11	UNIV MICH-ANN ARBOR	L E LASHER	GSFC	S L HAWLEY	NAG 5-2621	5171
11	UNIV MICH-ANN ARBOR	L E LASHER	ARC	T DONAHUE	NAG 2-488	5210
11	UNIV MICH-ANN ARBOR	L E LASHER	ARC	A NAGY	NAG 2-491	5211
11	UNIV MICH-ANN ARBOR	F M CURREN	ARC	L H BRACE	NAG 2-644	5212
11	UNIV MICH-ANN ARBOR	D WEST	LERC	A D GALLIMORE	NAG 3-1504	5222
11	UNIV MICH-ANN ARBOR	R PETRE	GSFC	T J CLARKE	NAG 5-1030	5228
11	UNIV MICH-ANN ARBOR	R PETRE	GSFC	J N BREGMAN	NAG 5-1658	5232
11	UNIV MICH-ANN ARBOR	R PETRE	GSFC	H D ALLER	NAG 5-1820	5235
11	UNIV MICH-ANN ARBOR	R PETRE	GSFC	J N BREGMAN	NAG 5-1955	5236
11	UNIV MICH-ANN ARBOR	J P NORRIS	GSFC	M FATUZZO	NAG 5-2071	5237
11	UNIV MICH-ANN ARBOR	D WEST	GSFC	M R COMBI	NAG 5-2110	5238
11	UNIV MICH-ANN ARBOR	D WEST	GSFC	M R COMBI	NAG 5-2397	5241
11	UNIV MICH-ANN ARBOR	R PETRE	GSFC	A E EVRARD	NAG 5-2457	5242
11	UNIV MICH-ANN ARBOR	D WEST	GSFC	W HARRIS	NAG 5-2458	5243
11	UNIV MICH-ANN ARBOR	D WEST	GSFC	G E BALLESTER	NAG 5-2459	5244
11	UNIV MICH-ANN ARBOR	J P NORRIS	GSFC	C W AKERLOF	NAG 5-2506	5245
11	UNIV MICH-ANN ARBOR	R PETRE	GSFC	D O RICHSTONE	NAG 5-2522	5246
11	UNIV MICH-ANN ARBOR	R CAMPBELL	GSFC	J KOZYRA	NAG 5-2552	5247
11	UNIV MICH-ANN ARBOR	R J OLIVERSEN	GSFC	R J NICIEJENSKI	NAG 5-2649	5248
11	UNIV MICH-ANN ARBOR	N WHITE	GSFC	J BREGMAN	NAG 5-2732	5249
11	UNIV MICH-ANN ARBOR	J T BERGSTRALH	HQ	T I GOMBOSI	NAGW 1366	5262
11	UNIV MICH-ANN ARBOR	J T BERGSTRALH	HQ	J T CLARKE	NAGW 1766	5267
11	UNIV MICH-ANN ARBOR	J T BERGSTRALH	HQ	S ATREYA	NAGW 1771	5268
11	UNIV MICH-ANN ARBOR	J BERGSTRALH	HQ	M R COMBI	NAGW 1907	5269
11	UNIV MICH-ANN ARBOR	J H RAHE	HQ	M R COMBI	NAGW 1908	5270
11	UNIV MICH-ANN ARBOR	J BERGSTRALH	HQ	M COMBI	NAGW 1946	5271
11	UNIV MICH-ANN ARBOR	G S KUTTER	HQ	J N BREGMAN	NAGW 2135	5276
11	UNIV MICH-ANN ARBOR	G S KUTTER	HQ	A E EVRARD	NAGW 2367	5280
11	UNIV MICH-ANN ARBOR	L J CAROFF	HQ	F C ADAMS	NAGW 2802	5286
11	UNIV MICH-ANN ARBOR	J H RAHE	HQ	G E BALLESTER	NAGW 4009	5295
11	UNIV MICH-ANN ARBOR	J ALEXANDER	HQ	J N BREGMAN	NGT 00-050-901	5332
11	WAYNE STATE UNIV	F G HALL	GSFC	N S GOEL	NAG 5-2098	5355
11	AUGSBURG COLLEGE	F SIX	MSFC		NAG 8-1001	5363
11	MANKATO STATE UNIV	J P NORRIS	GSFC	J E HAKKILA	NAG 5-2363	5365
11	U MINN-MNPLS-ST PAUL	D WEST	GSFC	E D SKILLMAN	NAG 5-1768	5381
11	U MINN-MNPLS-ST PAUL	L S WALTER	GSFC	H H CHENG	NAG 5-1846	5382
11	U MINN-MNPLS-ST PAUL	D WEST	GSFC	R M HUMPHREYS	NAG 5-2581	5384
11	U MINN-MNPLS-ST PAUL	M E NEIN	MSFC	W L GARRARD	NAG 8-855	5386
11	U MINN-MNPLS-ST PAUL	J H RAHE	HQ	R G GEHRZ	NAGW 2324	5396
11	U MINN-MNPLS-ST PAUL	M M MELLOTT	HQ	R L LYSAK	NAGW 2653	5399
11	U MINN-MNPLS-ST PAUL	G R RIEGLER	HQ	E D SKILLMAN	NAGW 3189	5403
11	U MINN-MNPLS-ST PAUL	B KLEIN	GSFC	K GEOTZ	NAS 5-31219	5408
11	U MINN-MNPLS-ST PAUL	D HOLLAND	HQ	R D GEHRZ	NGT 00-051-296	5429
11	U MINN-MNPLS-ST PAUL	D HOLLAND	HQ	E D SKILLMAN	NGT 00-051-334	5430

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV MO-ST LOUIS	W L QUAIDE	HQ	J J O'BRIEN	NAGW 2474	5506
11	WASHINGTON UNIVERSITY	W L QUAIDE	HQ	B T FEGLEY	NAGW 2861	5527
11	WASHINGTON UNIVERSITY	W L QUAIDE	HQ	B T FEGLEY	NAGW 2867	5528
11	WASHINGTON UNIVERSITY	R STACHNIK	HQ	C M WILL	NAGW 2909	5529
11	WASHINGTON UNIVERSITY	R V STACHNIK	HQ	C M WILL	NAGW 3874	5545
11	MONTANA STATE UNIV	R PETRE	GSFC	S TSURUTA	NAG 5-1830	5557
11	MONTANA STATE UNIV	J VARGAS	MSFC	S TSURUTA	NAG 8-230	5558
11	MONTANA STATE UNIV	J VARGAS	MSFC	S TSURUTA	NAG 8-289	5559
11	MONTANA STATE UNIV	G S KUTTER	HQ	S TSURUTA	NAGW 2208	5561
11	MONTANA STATE UNIV	R STACHNIK	HQ	L A LINDBLOM	NAGW 2951	5563
11	UNIV NEBRASKA-LINCLN	F HALL	GSFC	E WALTER-SHEA	NAG 5-2628	5589
11	UNIV NEBRASKA-LINCLN	J T BERGSTRAHL	HQ	J A SAMSON	NAGW 1751	5594
11	UNIV NEBRASKA-LINCLN	G S KUTTER	HQ	N R SIMON	NAGW 2395	5595
11	UNIV NEVADA-L VEGAS	D VITAGLIANO	GSFC	D WEISTROP	NAS 5-31231	5613
11	UNIV OF NEVADA-RENO	D WEST	GSFC	M RODRIGUE	NAG 5-2136	5615
11	DARTMOUTH COLLEGE	R PETRE	GSFC	R A FESEN	NAG 5-2138	5624
11	DARTMOUTH COLLEGE	R PETRE	GSFC	J R THORSTENSEN	NAG 5-2164	5625
11	DARTMOUTH COLLEGE	R OLIVERSEN	GSFC	R A FESEN	NAG 5-2314	5627
11	DARTMOUTH COLLEGE	D WEST	GSFC	R A FESEN	NAG 5-2337	5628
11	DARTMOUTH COLLEGE	F C OWENS	HQ	G WEGNER	NGT 00-050-810	5644
11	UNIV NEW HAMP-DURHAM	J P NORRIS	GSFC	W T VESTRAND	NAG 5-1561	5656
11	UNIV NEW HAMP-DURHAM	J P NORRIS	GSFC	D J FORREST	NAG 5-1562	5657
11	UNIV NEW HAMP-DURHAM	J P NORRIS	GSFC	J M RYAN	NAG 5-2172	5658
11	UNIV NEW HAMP-DURHAM	J NORRIS	GSFC	J M RYAN	NAG 5-2350	5661
11	UNIV NEW HAMP-DURHAM	J P NORRIS	GSFC	M L MCCONNELL	NAG 5-2388	5662
11	UNIV NEW HAMP-DURHAM	J P NORRIS	GSFC	E CHUPP	NAG 5-2420	5663
11	UNIV NEW HAMP-DURHAM	J P NORRIS	GSFC	D C MEREDITH	NAG 5-2731	5664
11	UNIV NEW HAMP-DURHAM	L S LAPIANA	HQ	E L CHUPP	NAGW 3175	5688
11	UNIV NEW HAMP-DURHAM	W J WAGNER	HQ	W VESTRAND	NAGW 3538	5694
11	UNIV NEW HAMP-DURHAM	L J KALUZIENSKI	HQ	J RYAN	NAGW 3761	5698
11	UNIV NEW HAMP-DURHAM	J NORRIS	GSFC	J RYAN	NAS 5-26645	5701
11	UNIV NEW HAMP-DURHAM	R OLIVERSEN	GSFC	W T VESTRAND	NAS 5-32062	5704
11	PRINCETON UNIVERSITY	J MATHER	GSFC	D T WILKINSON	NAG 5-1310	5731
11	PRINCETON UNIVERSITY	S SOBIESKI	GSFC	E J GROTH	NAG 5-1629	5734
11	PRINCETON UNIVERSITY	S R HEAP	GSFC	E B JENKINS	NAG 5-1714	5735
11	PRINCETON UNIVERSITY	D WEST	GSFC	E L FLTZPATRICK	NAG 5-1769	5736
11	PRINCETON UNIVERSITY	J P NORRIS	GSFC	R WIJERS	NAG 5-1816	5737
11	PRINCETON UNIVERSITY	J P NORRIS	GSFC	M TAVANI	NAG 5-1854	5738
11	PRINCETON UNIVERSITY	R PETRE	GSFC	R A DALY	NAG 5-1875	5739
11	PRINCETON UNIVERSITY	J NORRIS	GSFC	B PACZYNSKI	NAG 5-1901	5740
11	PRINCETON UNIVERSITY	J P NORRIS	GSFC	M TAVANI	NAG 5-2234	5742
11	PRINCETON UNIVERSITY	D WEST	GSFC	G R KNAPP	NAG 5-2376	5744
11	PRINCETON UNIVERSITY	J P NORRIS	GSFC	J H TAYLOR	NAG 5-2410	5745
11	PRINCETON UNIVERSITY	D WEST	GSFC	L A PAGE	NAG 5-2412	5746
11	PRINCETON UNIVERSITY	E CHENG	GSFC	L PAGE	NAG 5-2549	5747
11	PRINCETON UNIVERSITY	N WHITE	GSFC	M T AVANI	NAG 5-2593	5748
11	PRINCETON UNIVERSITY	D WEST	GSFC	D N SPERGEL	NAG 5-2693	5749
11	PRINCETON UNIVERSITY	D WEST	GSFC	D T WILKINSON	NAG 5-2697	5750
11	PRINCETON UNIVERSITY	G S LEVY	HQ	B T DRAINE	NAGW 1973	5756
11	PRINCETON UNIVERSITY	G S KUTTER	HQ	J E GUNN	NAGW 2118	5757
11	PRINCETON UNIVERSITY	G S KUTTER	HQ	E L TURNER	NAGW 2173	5758
11	PRINCETON UNIVERSITY	G S KUTTER	HQ	J GOODMAN	NAGW 2419	5759
11	PRINCETON UNIVERSITY	G S KUTTER	HQ	J P OSTRICKER	NAGW 2448	5760
11	PRINCETON UNIVERSITY	J K ALEXANDER	HQ	D T WILKINSON	NAGW 2801	5762
11	PRINCETON UNIVERSITY	L LAPIANA	HQ	P E TURNER	NAGW 3233	5765
11	PRINCETON UNIVERSITY	D VITAGLIANO	GSFC	E JENKINS	NAS 5-30110	5770
11	PRINCETON UNIVERSITY	D HOLLAND	HQ	N A BAHCALL	NGT 00-051-295	5781
11	PRINCETON UNIVERSITY	I D BROWNE	JSC	G F HERZOG	NAG 9-26	5791
11	RUTGERS ST U-N BRNSK	D WEST	GSFC	D J RAYMOND	NAG 5-767	5824
11	NEW MEX INST MINING	F C WITTEBORN	ARC	J A EILEK	NCC 2-364	5828
11	NEW MEX INST MINING					

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	NEW MEX ST U-LAS CR	J P NORRIS	GSFC	B J MCNAMARA	NAG 5-1516	5831
11	NEW MEX ST U-LAS CR	R PETRE	GSFC	J O BURNS	NAG 5-1737	5832
11	NEW MEX ST U-LAS CR	R PETRE	GSFC	J O BURNS	NAG 5-1819	5833
11	NEW MEX ST U-LAS CR	R PETRE	GSFC	R A WALTERBOS	NAG 5-1924	5834
11	NEW MEX ST U-LAS CR	R PETRE	GSFC	B J MCNAMARA	NAG 5-2091	5836
11	NEW MEX ST U-LAS CR	D WEST	GSFC	R A WALTERBOS	NAG 5-2426	5838
11	NEW MEX ST U-LAS CR	R PETRE	GSFC	B MCNAMARA	NAG 5-2702	5839
11	NEW MEX ST U-LAS CR	D THOMPSON	JSC	J O BURNS	NAG 9-396	5842
11	NEW MEX ST U-LAS CR	M M MELLOTT	HQ	R L GOLDEN	NAGW 110	5844
11	NEW MEX ST U-LAS CR	J RAHE	HQ	R REEBE	NAGW 1802	5845
11	NEW MEX ST U-LAS CR	G S KUTTER	HQ	N A DEVEREUX	NAGW 2630	5847
11	NEW MEX ST U-LAS CR	G R RIEGLER	HQ	J BURNS	NAGW 3152	5849
11	NEW MEX ST U-LAS CR	L LAPIANA	HQ	B J MCNAMARA	NAGW 3236	5850
11	NEW MEX ST U-LAS CR	L S LAPIANA	HQ	P J BURNS	NAGW 3264	5851
11	NEW MEX ST U-LAS CR	A BLUM	GSFC	F KUELLMER	NAS 5-30749	5854
11	NEW MEX ST U-LAS CR	R E STREITMATTER	GSFC	R L GOLDEN	NAS 5-31852	5857
11	NEW MEX ST U-LAS CR	J B POLLACK	ARC	M S MARLEY	NCC 2-5048	5859
11	UNIV OF NEW MEXICO	M E NEIN	MSFC	K M CHUA	NAG 8-894	5878
11	CITY U OF NY CTY COL	P CASSEN	ARC	C YUAN	NCA 2-695	5907
11	COLUMBIA UNIVERSITY	R PETRE	GSFC	J PATTERSON	NAG 5-1598	5936
11	COLUMBIA UNIVERSITY	R PETRE	GSFC	D J HELEAND	NAG 5-1912	5937
11	COLUMBIA UNIVERSITY	R PETRE	GSFC	J P HALPERN	NAG 5-1935	5938
11	COLUMBIA UNIVERSITY	R PETRE	GSFC	J O PATTERSON	NAG 5-1958	5941
11	COLUMBIA UNIVERSITY	J P NORRIS	GSFC	M A RUDERMAN	NAG 5-2016	5943
11	COLUMBIA UNIVERSITY	J P NORRIS	GSFC	J SHAHAM	NAG 5-2017	5944
11	COLUMBIA UNIVERSITY	J P NORRIS	GSFC	J P HALPERN	NAG 5-2051	5945
11	COLUMBIA UNIVERSITY	R PETRE	GSFC	T T HAMILTON	NAG 5-2079	5947
11	COLUMBIA UNIVERSITY	D WEST	GSFC	J P HALPERN	NAG 5-2092	5948
11	COLUMBIA UNIVERSITY	J NORRIS	GSFC	P KAARET	NAG 5-2235	5949
11	COLUMBIA UNIVERSITY	N WHITE	GSFC	D HELFAND	NAG 5-2272	5950
11	COLUMBIA UNIVERSITY	R OLIVERSEN	GSFC	D C MARTIN	NAG 5-2309	5951
11	COLUMBIA UNIVERSITY	D WEST	GSFC	J O PATTERSON	NAG 5-2414	5952
11	COLUMBIA UNIVERSITY	N WHITE	GSFC	J P HALPERN	NAG 5-2524	5953
11	COLUMBIA UNIVERSITY	N WHITE	GSFC	D J HELFAND	NAG 5-2556	5954
11	COLUMBIA UNIVERSITY	R OLIVERSEN	GSFC	J P HALPERN	NAG 5-2569	5955
11	COLUMBIA UNIVERSITY	L J KALUZIENSKI	HQ	J SHAHAM	NAGW 1618	5962
11	COLUMBIA UNIVERSITY	L J KALUZIENSKI	HQ	E APRILE	NAGW 2013	5967
11	COLUMBIA UNIVERSITY	G S KUTTER	HQ	R M RICH	NAGW 2479	5970
11	COLUMBIA UNIVERSITY	G S KUTTER	HQ	D J HELFAND	NAGW 2507	5971
11	COLUMBIA UNIVERSITY	G S KUTTER	HQ	J O PATTERSON	NAGW 2565	5972
11	COLUMBIA UNIVERSITY	G S KUTTER	HQ	T T HAMILTON	NAGW 2566	5973
11	COLUMBIA UNIVERSITY	L J KALUZIENSKI	HQ	J APPLGATE	NAGW 3075	5979
11	COLUMBIA UNIVERSITY	R V STACHNIK	HQ	C MARTIN	NAGW 3945	5984
11	COLUMBIA UNIVERSITY	R OLIVERSEN	GSFC	D HELFOND	NAS 5-32063	5985
11	COLUMBIA UNIVERSITY	B CARLSON	GSFC	M A RUDERMAN	NCC 5-37	5989
11	COLUMBIA UNIVERSITY	F C OWENS	HQ	C MARTIN	NGT 00-050-777	6003
11	CORNELL UNIVERSITY	C D LAUGHLIN	ARC	T HERTER	NAG 2-207	6014
11	CORNELL UNIVERSITY	C R MCCREIGHT	ARC	T L HERTER	NAG 2-660	6016
11	CORNELL UNIVERSITY	D H BROCKER	ARC	J M CORDES	NAG 2-697	6018
11	CORNELL UNIVERSITY	C D LAUGHLIN	ARC	G STACEY	NAG 2-800	6020
11	CORNELL UNIVERSITY	C D LAUGHLIN	ARC	T HERTER	NAG 2-926	6022
11	CORNELL UNIVERSITY	J P NORRIS	GSFC	J M CORDES	NAG 5-1452	6039
11	CORNELL UNIVERSITY	J P NORRIS	GSFC	I M WASSERMAN	NAG 5-1563	6041
11	CORNELL UNIVERSITY	D WEST	GSFC	F F SALPETER	NAG 5-1669	6042
11	CORNELL UNIVERSITY	J P NORRIS	GSFC	T J LOREDO	NAG 5-1758	6043
11	CORNELL UNIVERSITY	D WEST	GSFC	B M LEWIS	NAG 5-2120	6044
11	CORNELL UNIVERSITY	D WEST	GSFC	P GOLDSMITH	NAG 5-2334	6045
11	CORNELL UNIVERSITY	J P NORRIS	GSFC	J M CORDES	NAG 5-2436	6046
11	CORNELL UNIVERSITY	L J KALUZIENSKI	HQ	E E SALPETER	NAGW 666	6053
11	CORNELL UNIVERSITY	K FOX	HQ	W R THOMPSON	NAGW 1444	6056

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	CORNELL UNIVERSITY	J T BERGSTRAHL	HQ	P GIERASCH	NAGW 1997	6059
11	CORNELL UNIVERSITY	G S KUTTER	HQ	D F CHERNOFF	NAGW 2224	6064
11	CORNELL UNIVERSITY	T A MAXWELL	HQ	S W SQUYRES	NAGW 2225	6065
11	CORNELL UNIVERSITY	G S KUTTER	HQ	S L SHAPIRO	NAGW 2364	6067
11	CORNELL UNIVERSITY	M D BICAY	HQ	J R HOUCK	NAGW 2551	6070
11	CORNELL UNIVERSITY	L J CAROFF	HQ	A J SIEVERS	NAGW 2768	6072
11	CORNELL UNIVERSITY	L J CAROFF	HQ	J R HOUCK	NAGW 2870	6073
11	CORNELL UNIVERSITY	H C BRINTON	HQ	J VEYERKA	NAGW 3591	6084
11	CORNELL UNIVERSITY	J H RAHE	HQ	J VEYERKA	NAGW 3837	6086
11	CORNELL UNIVERSITY	L J CAROFF	HQ	G STACEY	NAGW 3925	6087
11	CORNELL UNIVERSITY	J H RAHE	HQ	P NICHOLSON	NAGW 4001	6089
11	CORNELL UNIVERSITY	J N CUZZI	ARC	P D NICHOLSON	NCA 2-640	6093
11	CORNELL UNIVERSITY	J N CUZZI	ARC	P D NICHOLSON	NCA 2-832	6096
11	CORNELL UNIVERSITY	F C OWENS	HQ	P J GIERASCH	NGT 00-050-846	6104
11	CORNELL UNIVERSITY	F C OWENS	HQ	S V BECKWITH	NGT 00-050-847	6105
11	CORNELL UNIVERSITY	F C OWENS	HQ	G FIELD	NGT 00-050-850	6106
11	CORNELL UNIVERSITY	D HOLLAND	HQ	C E SAGAN	NGT 00-051-329	6114
11	CORNELL UNIVERSITY	F C GILLET	HQ	A E GLASSGOLD	NAGW 630	6134
11	NEW YORK UNIVERSITY	D WEST	GSFC	M L KUTNER	NAG 5-2392	6163
11	RENSSELAER POLY-NY	L J CAROFF	HQ	C M LEUNG	NAGW 2817	6169
11	RENSSELAER POLY-NY	L J CAROFF	HQ	W G ROBERGE	NAGW 3001	6170
11	RENSSELAER POLY-NY	G R RIEGLER	HQ	D WHITTET	NAGW 3144	6171
11	RENSSELAER POLY-NY	L J CAROFF	HQ	D C WHITTET	NAGW 4039	6172
11	RENSSELAER POLY-NY	A G TIELENS	ARC	W ROBERGE	NCC 2-5015	6176
11	ROCHESTER INST TECH	T KOSTIUK	HQ	Z NINKEY	NAGW 4135	6197
11	STATE UNIV NY-ALBANY	D C CARTER	MSFC	W M GIBSON	NAG 8-926	6207
11	STATE U NY-STONY BRK	D WEST	GSFC	P M SOLOMON	NAG 5-1231	6249
11	STATE U NY-STONY BRK	R PETRE	GSFC	F M WALTER	NAG 5-1594	6250
11	STATE U NY-STONY BRK	D WEST	GSFC	F M WALTER	NAG 5-1663	6251
11	STATE U NY-STONY BRK	A SMITH	GSFC	F M WALTER	NAG 5-1862	6253
11	STATE U NY-STONY BRK	R PETRE	GSFC	F M WALTER	NAG 5-1874	6254
11	STATE U NY-STONY BRK	D WEST	GSFC	F M WALTER	NAG 5-1962	6255
11	STATE U NY-STONY BRK	D WEST	GSFC	P M SOLOMON	NAG 5-2002	6256
11	STATE U NY-STONY BRK	R OLIVERSEN	GSFC	F M WALTER	NAG 5-2366	6257
11	STATE U NY-STONY BRK	D WEST	GSFC	A YAHIL	NAG 5-2403	6258
11	STATE U NY-STONY BRK	D WEST	GSFC	P M SOLOMON	NAG 5-2404	6259
11	STATE U NY-STONY BRK	D WEST	GSFC	F WALTER	NAG 5-2507	6260
11	STATE U NY-STONY BRK	J BERGSTRAHL	HQ	J FOX	NAGW 665	6262
11	STATE U NY-STONY BRK	J T BERGSTRAHL	HQ	P VARANASI	NAGW 1894	6267
11	STATE U NY-STONY BRK	W L QUAIDE	HQ	R KNACKE	NAGW 2796	6272
11	STATE U NY-STONY BRK	W L QUAIDE	HQ	J L FOX	NAGW 2958	6273
11	STATE U NY-STONY BRK	P ROGERS	HQ	J LISSAUER	NAGW 4040	6278
11	STATE U NY-STONY BRK	P ROGERS	HQ	M SIMON	NAGW 4113	6279
11	SYRACUSE UNIVERSITY	L S LAPIANA	HQ	P G VIDALI	NAGW 3256	6305
11	UNIV OF ROCHESTER	J H GOEBEL	ARC	W J FORREST	NAG 2-117	6310
11	UNIV OF ROCHESTER	M BICAY	HQ	J L PIPHER	NAGW 2393	6314
11	UNIV OF ROCHESTER	G S KUTTER	HQ	J H THOMAS	NAGW 2444	6315
11	UNIV OF ROCHESTER	J T LYNCH	HQ	J PIPHER	NGT 00-050-817	6319
11	NO CAROLINA STATE U	R PETRE	GSFC	S P REYNOLDS	NAG 5-2212	6389
11	NO CAROLINA STATE U	L J KALUZIENSKI	HQ	J M BLONDIN	NAGW 3658	6400
11	NO CAROLINA STATE U	L J KALUZIENSKI	HQ	J M BLONDIN	NAGW 3806	6401
11	UNIV N CAR-ASHVILLE	J P NORRIS	GSFC	J K DAUGHERTY	NAG 5-2023	6433
11	UNIV N CAR-ASHVILLE	J P NORRIS	GSFC	J K DAUGHERTY	NAG 5-2518	6434
11	UNIV N CAR-CHPL HILL	D WEST	GSFC	S C BALACHANDRAN	NAG 5-2116	6435
11	UNIV N CAR-CHPL HILL	R PETRE	GSFC	G N CECIL	NAG 5-2347	6436
11	UNIV N CAR-CHPL HILL	R PETRE	GSFC	J A ROSE	NAG 5-2543	6437
11	UNIV N CAR-CHPL HILL	J T BERGSTRAHL	HQ	R E MILLER	NAGW 1576	6440
11	UNIV N CAR-CHPL HILL	L J KALUZIENSKI	HQ	J M BLONDIN	NAGW 2934	6441
11	UNIV OF NORTH DAKOTA	R W STEWART	GSFC	M POELLOT	NAG 5-2699	6461
11	CASE WESTERN RESERVE	J P NORRIS	GSFC	G M FRYE	NAG 5-1451	6503

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	CASE WESTERN RESERVE	D DEMING	GSFC	M MEHREGANY	NAG 5-2559	6504
11	DENSION UNIV	J T BERGSTRALH	HQ	M E MICKELSON	NAGW 1765	6641
11	OHIO STATE UNIV	D WEST	GSFC	A K PRADHAM	NAG 5-1644	6687
11	OHIO STATE UNIV	D WEST	GSFC	F W HAMANN	NAG 5-1645	6688
11	OHIO STATE UNIV	D WEST	GSFC	B M PETERSON	NAG 5-1824	6689
11	OHIO STATE UNIV	D WEST	GSFC	VADER	NAG 5-1992	6690
11	OHIO STATE UNIV	R PETRE	GSFC	R M WAGNER	NAG 5-2192	6692
11	OHIO STATE UNIV	J P NORRIS	GSFC	R M WAGNER	NAG 5-2355	6693
11	OHIO STATE UNIV	D WEST	GSFC	B PETERSON	NAG 5-2477	6694
11	OHIO STATE UNIV	J D RUMMEL	HQ	R S DIXON	NAGW 2786	6704
11	OHIO STATE UNIV	L J CAROFF	HQ	E HERBST	NAGW 2906	6705
11	OHIO STATE UNIV	J D RUMMEL	HQ	C A KLEIN	NAGW 3668	6707
11	OHIO STATE UNIV	D WEST	GSFC	A PRADHAN	NAS 5-32643	6716
11	UNIV OF CINCINNATI	D WEST	GSFC	M L SLTKO	NAG 5-1770	6799
11	UNIV OF CINCINNATI	L LAPIANA	HQ	M L SITKO	NAGW 3230	6803
11	UNIV OF TOLEDO	D WEST	GSFC	B W BOPP	NAG 5-954	6856
11	UNIV OF TOLEDO	D WEST	GSFC	N MORRISON	NAG 5-2460	6857
11	UNIV OF TOLEDO	D WEST	GSFC	B W	NAG 5-2461	6858
11	UNIV OF TOLEDO	J BERGSTRALH	HQ	P B JAMES	NAGW 2337	6859
11	UNIV OF TOLEDO	D HUENEMOERDER	HQ	S R FEDERMAN	NAGW 2457	6860
11	UNIV OF TOLEDO	L J CAROFF	HQ	A N WITT	NAGW 2794	6861
11	UNIV OF TOLEDO	G R RIEGLER	HQ	A WITT	NAGW 3168	6862
11	UNIV OF TOLEDO	L LAPIANA	HQ	A N WITT	NAGW 3240	6863
11	UNIV OF TOLEDO	R V STACHNIK	HQ	S R FEDERMAN	NAGW 3840	6864
11	UNIV OF TOLEDO	E ERICKSON	ARC	L S ANDERSON	NCA 2-645	6865
11	UNIV OKLAHOMA-NORMAN	D WEST	GSFC	R B HENRY	NAG 5-2389	6898
11	UNIV OKLAHOMA-NORMAN	L M BARBIER	GSFC	G R KALBFLEISCH	NAG 5-2558	6899
11	UNIV OKLAHOMA-NORMAN	R V STACHNIK	HQ	D R BRANCH	NAGW 2999	6903
11	OREGON STATE UNIV	W QUAIDE	HQ	J R BARNES	NAGW 2445	6926
11	SOUTHERN OREGON ST C	F SIX	MSFC	J D'ALLURA	NAG 8-222	6963
11	UNIV OREGON-EUGENE	R PETRE	GSFC	G D BOTHUN	NAG 5-2086	6967
11	UNIV OREGON-EUGENE	D WEST	GSFC	J IMAMURA	NAG 5-2418	6968
11	UNIV OREGON-EUGENE	D WEST	GSFC	G D BOTHUN	NAG 5-2662	6969
11	DREXEL UNIVERSITY	D P HUENEMOERDER	HQ	S L MCMILLAN	NAGW 2559	7023
11	FRANKLIN-MARSHALL C	F C WITTEBORN	ARC	D E BACKMAN	NCC 2-745	7028
11	LEHIGH UNIVERSITY	D WEST	GSFC	G E MCCLUSKEY	NAG 5-2100	7033
11	LEHIGH UNIVERSITY	C C CHACKERIAN	ARC	R LOVEJOY	NCA 2-673	7037
11	PENN STATE U-UNIV PK	L J EARLY	GSFC	G P GARMIE	NAG 5-100	7086
11	PENN STATE U-UNIV PK	R PETRE	GSFC	D N BURROWS	NAG 5-1535	7089
11	PENN STATE U-UNIV PK	R PETRE	GSFC	D FEIGELSON	NAG 5-1678	7090
11	PENN STATE U-UNIV PK	R PETRE	GSFC	J A NOUSEK	NAG 5-1693	7091
11	PENN STATE U-UNIV PK	D WEST	GSFC	R A WADE	NAG 5-1698	7092
11	PENN STATE U-UNIV PK	R PETRE	GSFC	G P GARMIRE	NAG 5-1708	7093
11	PENN STATE U-UNIV PK	R PETRE	GSFC	D P HUENEMOERDER	NAG 5-1751	7094
11	PENN STATE U-UNIV PK	R PETRE	GSFC	F A DOMINIC CORDOVA	NAG 5-1763	7095
11	PENN STATE U-UNIV PK	R PETRE	GSFC	D N BURROWS	NAG 5-1786	7096
11	PENN STATE U-UNIV PK	D WEST	GSFC	L W RAMSEY	NAG 5-1831	7098
11	PENN STATE U-UNIV PK	R PETRE	GSFC	L W RAMSEY	NAG 5-1898	7099
11	PENN STATE U-UNIV PK	R PETRE	GSFC	F A CORDOVA	NAG 5-1899	7100
11	PENN STATE U-UNIV PK	R PETRE	GSFC	G P GARMIRE	NAG 5-1950	7102
11	PENN STATE U-UNIV PK	R PETRE	GSFC	F D FEIGELSON	NAG 5-1959	7103
11	PENN STATE U-UNIV PK	D WEST	GSFC	J E NEFF	NAG 5-1968	7104
11	PENN STATE U-UNIV PK	D WEST	GSFC	J E NEFF	NAG 5-2118	7105
11	PENN STATE U-UNIV PK	D WEST	GSFC	WADE	NAG 5-2125	7106
11	PENN STATE U-UNIV PK	R PETRE	GSFC	R A WADE	NAG 5-2144	7107
11	PENN STATE U-UNIV PK	R PETRE	GSFC	R H CORBET	NAG 5-2214	7108
11	PENN STATE U-UNIV PK	J P NORRIS	GSFC	P I MESZAROS	NAG 5-2362	7109
11	PENN STATE U-UNIV PK	D WEST	GSFC	D BURROWS	NAG 5-2437	7110
11	PENN STATE U-UNIV PK	N E WHITE	GSFC	J NOUSEK	NAG 5-2483	7111
11	PENN STATE U-UNIV PK	N WHITE	GSFC	E D FEIGELSON	NAG 5-2527	7112

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	PENN STATE U-UNIV PK	N WHITE	GSFC	J A NOUSEK	NAG 5-2528	7113
11	PENN STATE U-UNIV PK	N WHITE	GSFC	D N BURROWS	NAG 5-2537	7114
11	PENN STATE U-UNIV PK	L J KALUZIENSKI	HQ	P I MESZAROS	NAGW 1522	7131
11	PENN STATE U-UNIV PK	J R WEISS	HQ	J NOUSEK	NAGW 1713	7132
11	PENN STATE U-UNIV PK	J WEISS	HQ	F A CORDOVA	NAGW 1920	7134
11	PENN STATE U-UNIV PK	G S KUTTER	HQ	E D FEIGELSON	NAGW 2120	7135
11	PENN STATE U-UNIV PK	G S KUTTER	HQ	J E NEFF	NAGW 2603	7138
11	PENN STATE U-UNIV PK	L S LAPIANA	HQ	D W WEEDMAN	NAGW 3136	7143
11	PENN STATE U-UNIV PK	G R RIEGLER	HQ	R CIARDULLO	NAGW 3159	7144
11	PENN STATE U-UNIV PK	G R RIEGLER	HQ	R WADE	NAGW 3171	7145
11	PENN STATE U-UNIV PK	F GIOVANE	HQ	F A CORDOVA	NAGW 3211	7146
11	PENN STATE U-UNIV PK	H C BRINTON	HQ	R F KNACKE	NAGW 3415	7151
11	PENN STATE U-UNIV PK	R V STACHNIK	HQ	J C CHARLTON	NAGW 3571	7152
11	PENN STATE U-UNIV PK	J H RAHE	HQ	R KNACKE	NAGW 4124	7155
11	PENN STATE U-UNIV PK	N WHITE	GSFC	J NOUSEK	NAS 5-31827	7158
11	PENN STATE U-UNIV PK	R OLIVERSEN	GSFC	J A NOUSEK	NAS 5-32074	7159
11	PENN STATE U-UNIV PK	D WEST	GSFC	M AKRITAS	NAS 5-32669	7161
11	PENN STATE U-UNIV PK	N B CUMINGS	MSFC	G P GARMERE	NAS 8-38252	7162
11	PENN STATE U-UNIV PK	F C OWENS	HQ	G P GARMIRE	NGT 00-050-803	7182
11	PENN STATE U-UNIV PK	D HOLLAND	HQ	A WOLSZCZAN	NGT 00-051-316	7197
11	PENN STATE U-UNIV PK	F C OWENS	HQ	E D FEIGELSON	NGT 00-070-204	7198
11	SUSQUEHANNA UNIV	N F SIX	MSFC	R KOZLOWSKI	NAG 8-199	7205
11	UNIV OF PENNSYLVANIA	D K WEST	GSFC	R H KOCH	NAG 5-1168	7206
11	UNIV OF PENNSYLVANIA	M J MUMMA	GSFC	R KOCH	NAG 5-1473	7207
11	UNIV OF PITTSBURGH	R PETRE	GSFC	C HAZARD	NAG 5-1717	7225
11	UNIV OF PITTSBURGH	D WEST	GSFC	D A TURNSHEK	NAG 5-1778	7226
11	UNIV OF PITTSBURGH	D WEST	GSFC	R E LADBECK	NAG 5-2411	7227
11	UNIV OF PITTSBURGH	D WEST	GSFC	R S LADBECK	NAG 5-2495	7228
11	UNIV OF PITTSBURGH	J OWENS	MSFC	R E SCHULTE-LADBECK	NAG 8-1073	7231
11	UNIV OF PITTSBURGH	J H RAHE	HQ	J P WEFEL	NAGW 1270	7232
11	UNIV OF PITTSBURGH	J T BERGSTRALH	HQ	R JOHNSEN	NAGW 1764	7233
11	UNIV OF PITTSBURGH	R STACHNIK	HQ	R E LADBECK	NAGW 2977	7235
11	UNIV OF PITTSBURGH	L LAPIANA	HQ	P C HAZARD	NAGW 3231	7236
11	UNIV OF PITTSBURGH	L S LAPIANA	HQ	P D TURNSHEK	NAGW 3238	7237
11	UNIV OF PITTSBURGH	L LAPIANA	HQ	P R SCHULTE-LADBECK	NAGW 3239	7238
11	UNIV OF PITTSBURGH	R V STACHNIK	HQ	D J HILLIER	NAGW 3828	7239
11	VILLANOVA UNIVERSITY	D WEST	GSFC	E F GUINAN	NAG 5-382	7244
11	VILLANOVA UNIVERSITY	D WEST	GSFC	C AMBRUSTER	NAG 5-980	7245
11	VILLANOVA UNIVERSITY	R PETRE	GSFC	E F GUINAN	NAG 5-1662	7246
11	VILLANOVA UNIVERSITY	D WEST	GSFC	E M SION	NAG 5-1836	7247
11	VILLANOVA UNIVERSITY	D WEST	GSFC	E F GUINAN	NAG 5-2160	7248
11	VILLANOVA UNIVERSITY	R OLIVERSEN	GSFC	E SION	NAG 5-2278	7249
11	VILLANOVA UNIVERSITY	R OLIVERSEN	GSFC	C W AMBRUSTER	NAG 5-2279	7250
11	VILLANOVA UNIVERSITY	PETRE	GSFC	C AMBRUSTER	NAG 5-2413	7251
11	VILLANOVA UNIVERSITY	D WEST	GSFC	J SIAH	NAG 5-2462	7252
11	VILLANOVA UNIVERSITY	D WEST	GSFC	M HUANG	NAG 5-2463	7253
11	VILLANOVA UNIVERSITY	R PETRE	GSFC	E F GUINAN	NAG 5-2494	7254
11	VILLANOVA UNIVERSITY	N E WHITE	GSFC	E GUINAN	NAG 5-2707	7255
11	VILLANOVA UNIVERSITY	G R RIEGLER	HQ	E SION	NAGW 3726	7256
11	VILLANOVA UNIVERSITY	D E SMITH	GSFC	J W HEAD	NAG 5-2183	7264
11	BROWN UNIVERSITY	E CHENG	GSFC	P TIMBIE	NAG 5-2629	7265
11	BROWN UNIVERSITY	J K ALEXANDER	HQ	P T TIMBIE	NAGW 2797	7279
11	BROWN UNIVERSITY	H C BRINTON	HQ	C PIETERS	NAGW 3756	7290
11	BROWN UNIVERSITY	J A NUTH	HQ	A G CAMERON	NAGW 2584	7319
11	UNIV OF RHODE ISLAND	D S LECKRONE	GSFC	S J ADELMAN	NAG 5-1551	7331
11	CITADEL MLTRY CO S C	D WEST	GSFC	S ADELMAN	NAG 5-2472	7332
11	CITADEL MLTRY CO S C	L S LAPIANA	HQ	S J ADELMAN	NAGW 3225	7333
11	CLEMSON UNIV-CLEMSON	J P NORRIS	GSFC	D H HARTMANN	NAG 5-1578	7341
11	CLEMSON UNIV-CLEMSON	D WEST	GSFC	M LEISING	NAG 5-2419	7342
11	UNIV SO CAROLINA-COL	R STACHNIK	HQ	A K DRUKER	NAGW 2510	7369

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	EAST TENN STATE UNIV	D WEST	GSFC			
11	FISK UNIVERSITY	F SIX	MSFC	C MCGRUDER	NAG 5-2130	7394
11	TENNESSEE STATE UNIV	D WEST	GSFC	J A EATON	NAG 8-218	7396
11	TENNESSEE STATE UNIV	D WEST	GSFC	F C FEKEL	NAG 5-1474	7412
11	TENNESSEE STATE UNIV	D WEST	GSFC	J A EATON	NAG 5-2464	7414
11	TENNESSEE STATE UNIV	J L RANDALL	MSFC	M R BUSBY	NAG 5-2682	7415
11	TENNESSEE STATE UNIV	J M DAVIS	MSFC	G HENRY	NAG 8-111	7416
11	TENNESSEE TECH U	W T POWERS	MSFC	D C VENTRICE	NAG 8-1014	7417
11	UNIV TENNESSEE-KNOXV	J BERGSTRALH	HQ	K FOX	NAG 8-206	7421
11	UNIV TENNESSEE-KNOXV	J BOYCE	HQ	H MCSWEEN	NAGW 2015	7441
11	VANDERBILT UNIVERSTY	D WEST	GSFC	D A WEINTRAUB	NAGW 3621	7446
11	VANDERBILT UNIVERSTY	C R CHAPPELL	MSFC	A M STRAUSS	NAG 5-1754	7460
11	RICE UNIVERSITY	L E LASHER	ARC	P A CLOUTIER	NAG 8-151	7461
11	RICE UNIVERSITY	D WEST	GSFC	R J DUFOUR	NAG 2-566	7522
11	RICE UNIVERSITY	J P NORRIS	GSFC	E P LIANG	NAG 5-262	7523
11	RICE UNIVERSITY	J P NORRIS	GSFC	E P LIANG	NAG 5-1515	7526
11	RICE UNIVERSITY	S SOBIESKI	GSFC	C R O'DELL	NAG 5-1547	7527
11	RICE UNIVERSITY	J P NORRIS	GSFC	E P LIANG	NAG 5-1626	7528
11	RICE UNIVERSITY	J P NORRIS	GSFC	R C HAYMES	NAG 5-2045	7529
11	RICE UNIVERSITY	D WEST	GSFC	R J DUFOUR	NAG 5-2515	7531
11	RICE UNIVERSITY	N LAL	GSFC	P REIF	NAG 5-2677	7532
11	RICE UNIVERSITY	N WHITE	GSFC	E LANG	NAG 5-2689	7533
11	RICE UNIVERSITY	C R CHAPPELL	MSFC	J W FREEMAN	NAG 5-2690	7534
11	RICE UNIVERSITY	L KALUZIENSKI	HQ	R C HAYMES	NAG 8-146	7536
11	RICE UNIVERSITY	L S LAPIANA	HQ	R C HAYMES	NAGW 2256	7547
11	RICE UNIVERSITY	A G TIELENS	ARC	R J DUFOUR	NAGW 3248	7554
11	RICE UNIVERSITY	F C OWENS	HQ	F C MICHEL	NCC 2-5008	7560
11	TEXAS A&M UNIVERSITY	M BURRELL	GSFC	K P BOWMAN	NGT 00-050-569	7567
11	UNIV HOUSTON-CL LAKE	S H GOLDSTEIN	JSC	G BLANFORD	NGT 00-051-185	7672
11	UNIV TEXAS-AUSTIN	C D LANGHLIN	ARC	P M HARVEY	NAG 9-718	7800
11	UNIV TEXAS-AUSTIN	C D LAUGHLIN	ARC	H L DINERSTEIN	NAG 2-67	7820
11	UNIV TEXAS-AUSTIN	L C HAUGHNEY	ARC	D T JAFFEE	NAG 2-372	7821
11	UNIV TEXAS-AUSTIN	L C HAUGHNEY	ARC	N J EVANS	NAG 2-419	7822
11	UNIV TEXAS-AUSTIN	C D LAUGHLIN	ARC	D F LESTER	NAG 2-420	7823
11	UNIV TEXAS-AUSTIN	C D LAUGHLIN	ARC	D F LESTER	NAG 2-748	7824
11	UNIV TEXAS-AUSTIN	S SOBIESKI	GSFC	D F LESTER	NAG 2-6002	7825
11	UNIV TEXAS-AUSTIN	S SOBIESKI	GSFC	W H JEFFERYS	NAG 5-1603	7831
11	UNIV TEXAS-AUSTIN	R PETRE	GSFC	D L LAMBERT	NAG 5-1616	7832
11	UNIV TEXAS-AUSTIN	A SMITH	GSFC	B J WILLS	NAG 5-1700	7833
11	UNIV TEXAS-AUSTIN	D WEST	GSFC	L M TRAFTON	NAG 5-1855	7834
11	UNIV TEXAS-AUSTIN	D WEST	GSFC	J C WHEELER	NAG 5-2139	7839
11	UNIV TEXAS-AUSTIN	J H RAHE	GSFC	D L LAMBERT	NAG 5-2484	7842
11	UNIV TEXAS-AUSTIN	G C CLAYTON	HQ	H J SMITH	NAGW 1477	7863
11	UNIV TEXAS-AUSTIN	J RAHE	HQ	G A SHIELDS	NAGW 1807	7865
11	UNIV TEXAS-AUSTIN	J H RAHE	HQ	A L COCHRAN	NAGW 2288	7869
11	UNIV TEXAS-AUSTIN	G S KUTTER	HQ	L M TRAFTON	NAGW 2314	7871
11	UNIV TEXAS-AUSTIN	G S KUTTER	HQ	P R SHAPIRO	NAGW 2399	7873
11	UNIV TEXAS-AUSTIN	J RAHE	HQ	E T VISHNIAC	NAGW 2418	7874
11	UNIV TEXAS-AUSTIN	L J CAROFF	HQ	W D COCHRAN	NAGW 2465	7875
11	UNIV TEXAS-AUSTIN	L J KALUZIENSKI	HQ	J C WHEELER	NAGW 2905	7879
11	UNIV TEXAS-AUSTIN	R V STACHNIK	HQ	J WHEELER	NAGW 2975	7882
11	UNIV TEXAS-AUSTIN	L S LAPIANA	HQ	P D HEMENWAY	NAGW 3111	7883
11	UNIV TEXAS-AUSTIN	H C BRINTON	HQ	D F LESTER	NAGW 3246	7886
11	UNIV TEXAS-AUSTIN	J H RAHE	HQ	E S BARKER	NAGW 3306	7887
11	UNIV TEXAS-AUSTIN	J H RAHE	HQ	A COCHRAN	NAGW 3971	7891
11	UNIV TEXAS-AUSTIN	J H RAHE	HQ	W COCHRAN	NAGW 3990	7892
11	UNIV TEXAS-AUSTIN	L J CAROFF	HQ	A WHIPPLE	NAGW 4012	7893
11	UNIV TEXAS-AUSTIN	F C OWENS	HQ	D JAFFE	NAGW 4027	7894
11	UNIV TEXAS-AUSTIN	F C OWENS	HQ	J C WHEELER	NGT 00-050-620	7915
11	UNIV TEXAS-AUSTIN	F C OWENS	HQ	G A SHIELDS	NGT 00-050-659	7916
11	UNIV TEXAS-AUSTIN	F C OWENS	HQ	P R SHAPIRO	NGT 00-050-849	7919

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV TEXAS-AUSTIN	J K ALEXANDER	HQ	D T JAFFE	NGT 00-050-998	7922
11	UNIV TEXAS-AUSTIN	D HOLLAND	HQ	C SEDAN	NGT 00-051-138	7925
11	UNIV TEXAS-DALLAS	J T BERGSTRAHL	HQ	R R HODGES	NAGW 2490	7943
11	BRIGHAM YOUNG UNIV	L E LASHER	ARC	D E JONES	NAG 2-687	7985
11	UNIV OF UTAH	J P NORRIS	GSFC	D B KIEDA	NAG 5-2349	8003
11	MIDDLEBURY COLLEGE	R PETRE	GSFC	P F WINKLER	NAG 5-1668	8044
11	GEORGE MASON UNIV	J P NORRIS	GSFC	M KAFATOS	NAG 5-2025	8095
11	GEORGE MASON UNIV	R OLIVERSEN	GSFC	M KAFATOS	NAG 5-2360	8099
11	GEORGE MASON UNIV	J C MATHER	GSFC	L OZERNOY	NAG 5-2442	8100
11	GEORGE MASON UNIV	J P NORRIS	GSFC	R J NEMIROFF	NAG 5-2710	8103
11	HAMPDEN-SYDNEY COL	C E FICHTEL	GSFC	D A KNIFFEN	NAG 5-1742	8106
11	RADFORD UNIVERSITY	F SIX	MSFC	J D ECKERT	NAG 8-1009	8204
11	UNIV OF VIRGINIA	T P STECHER	GSFC	R W O CONNELL	NAG 5-700	8229
11	UNIV OF VIRGINIA	D WEST	GSFC	R W O'CONNELL	NAG 5-1877	8232
11	UNIV OF VIRGINIA	R PETRE	GSFC	C L SARAZIN	NAG 5-1891	8233
11	UNIV OF VIRGINIA	R PETRE	GSFC	T X THUAN	NAG 5-2060	8236
11	UNIV OF VIRGINIA	N WHITE	GSFC	C L SARAZIN	NAG 5-2526	8239
11	UNIV OF VIRGINIA	L J KALUZIENSKI	HQ	J F HAWLEY	NAGW 1510	8243
11	UNIV OF VIRGINIA	G S KUTTER	HQ	R A CHEVALIER	NAGW 2376	8250
11	UNIV OF VIRGINIA	G S KUTTER	HQ	R W O'CONNELL	NAGW 2596	8252
11	UNIV OF VIRGINIA	L J CAROFF	HQ	T W CROWE	NAGW 4007	8256
11	UNIV OF VIRGINIA	P ROGERS	HQ	R JOHNSON	NAGW 4028	8257
11	UNIV OF VIRGINIA	P ROGERS	HQ	R JOHNSON	NAGW 4029	8258
11	UNIV OF VIRGINIA	G R RIEGLER	HQ	P R O'CONNELL	NAGW 4106	8260
11	UNIV OF WASHINGTON	D H BROCKER	ARC	W T SULLIVAN	NAG 2-698	8430
11	UNIV OF WASHINGTON	D WEST	GSFC	P W HODGE	NAG 5-1444	8440
11	UNIV OF WASHINGTON	R PETRE	GSFC	B H MARGON	NAG 5-1518	8441
11	UNIV OF WASHINGTON	R PETRE	GSFC	S F ANDERSON	NAG 5-1623	8443
11	UNIV OF WASHINGTON	R PETRE	GSFC	P SZKODY	NAG 5-1927	8445
11	UNIV OF WASHINGTON	R PETRE	GSFC	G WALLERSTEIN	NAG 5-1984	8446
11	UNIV OF WASHINGTON	D WEST	GSFC	P A SZKODY	NAG 5-2114	8447
11	UNIV OF WASHINGTON	J R FISCHER	GSFC	G LAKE	NAG 5-2213	8448
11	UNIV OF WASHINGTON	R OLIVERSEN	GSFC	P A SZKODY	NAG 5-2303	8450
11	UNIV OF WASHINGTON	R OLIVERSEN	GSFC	P SZKODY	NAG 5-2315	8451
11	UNIV OF WASHINGTON	D WEST	GSFC	P SZKODY	NAG 5-2356	8452
11	UNIV OF WASHINGTON	J VARGAS	MSFC	J E DEETER	NAG 8-207	8454
11	UNIV OF WASHINGTON	F HORZ	JSC	D E BROWNLEE	NAG 9-637	8457
11	UNIV OF WASHINGTON	M ZOLENSKY	JSC	D E BROWNLEE	NAG 9-683	8458
11	UNIV OF WASHINGTON	G S KUTTER	HQ	C J HOGAN	NAGW 2523	8478
11	UNIV OF WASHINGTON	L J CAROFF	HQ	C J HOGAN	NAGW 2569	8481
11	UNIV OF WASHINGTON	G S KUTTER	HQ	G LAKE	NAGW 2676	8485
11	UNIV OF WASHINGTON	G R RIEGLER	HQ	P SZKODY	NAGW 3158	8489
11	UNIV OF WASHINGTON	L LAPIANA	HQ	C J HOGAN	NAGW 3251	8492
11	UNIV OF WASHINGTON	Y PENDLETON	ARC	J B ADAMS	NCC 2-5084	8523
11	UNIV OF WASHINGTON	D K RUSSELL	HQ	G LAKE	NGT 00-070-314	8561
11	UNIV OF WASHINGTON	D K RUSSELL	HQ	B MARGON	NGT 00-070-325	8562
11	UNIV OF WASHINGTON	D WEST	GSFC	E BOHM-VITENSE	NSG-5398	8564
11	WASHINGTON ST UNIV	J K ALEXANDER	HQ	S HUDSON	NAGW 2823	8570
11	W VA WEYSLEYAN COL	J A NUTH	GSFC	P A WITHEY	NCC 5-71	8602
11	BELOIT COLLEGE	S SOBIESKI	GSFC	D J SCHROEDER	NAG 5-1620	8608
11	UNIV WISC-MADISON	C D LAUGHLIN	ARC	E B CHURCHWELL	NAG 2-859	8628
11	UNIV WISC-MADISON	Y KONDO	GSFC	J A CARDELLI	NAG 5-832	8638
11	UNIV WISC-MADISON	D WEST	GSFC	K H NORDSIECK	NAG 5-1463	8641
11	UNIV WISC-MADISON	S SOBIESKI	GSFC	R C BLESS	NAG 5-1613	8644
11	UNIV WISC-MADISON	R PETRE	GSFC	J P CASSINELLI	NAG 5-1683	8646
11	UNIV WISC-MADISON	R PETRE	GSFC	W T SANDERS	NAG 5-1726	8647
11	UNIV WISC-MADISON	D WEST	GSFC	K S BJORKMAN	NAG 5-1740	8648
11	UNIV WISC-MADISON	D WEST	GSFC	B SAVAGE	NAG 5-1806	8649
11	UNIV WISC-MADISON	R PETRE	GSFC	D MCCAMMON	NAG 5-1817	8650
11	UNIV WISC-MADISON	R PETRE	GSFC	J P CASSINELLI	NAG 5-1841	8651

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
11	UNIV WISC-MADISON	A SMITH	GSFC	B D SAVAGE	NAG 5-1852	8652
11	UNIV WISC-MADISON	R PETRE	GSFC	H B OGELMAN	NAG 5-1893	8653
11	UNIV WISC-MADISON	R PETRE	GSFC	W T SANDERS	NAG 5-1894	8654
11	UNIV WISC-MADISON	J P NORRIS	GSFC	W KLUZNIAK	NAG 5-2034	8655
11	UNIV WISC-MADISON	J P NORRIS	GSFC	W F FRY	NAG 5-2035	8656
11	UNIV WISC-MADISON	R PETRE	GSFC	M JUDA	NAG 5-2066	8657
11	UNIV WISC-MADISON	D WEST	GSFC	C M ANDERSON	NAG 5-2169	8658
11	UNIV WISC-MADISON	D WEST	GSFC	J P FINLEY	NAG 5-2170	8659
11	UNIV WISC-MADISON	D WEST	GSFC	J P CASSINELLI	NAG 5-2282	8660
11	UNIV WISC-MADISON	R PETRE	GSFC	J G HOESSEL	NAG 5-2534	8661
11	UNIV WISC-MADISON	N WHITE	GSFC	H B OGELMAN	NAG 5-2557	8662
11	UNIV WISC-MADISON	R J OLIVERSEN	GSFC	C M ANDERSON	NAG 5-2602	8664
11	UNIV WISC-MADISON	R J OLIVERSEN	GSFC	F SCHERB	NAG 5-2650	8665
11	UNIV WISC-MADISON	N WHITE	GSFC	E CHURCHWELL	NAG 5-2691	8666
11	UNIV WISC-MADISON	N WHITE	GSFC	J CASSINELLI	NAG 5-2705	8668
11	UNIV WISC-MADISON	R L KELLEY	GSFC	D MCCAMMON	NAG 5-2720	8669
11	UNIV WISC-MADISON	G C CLAYTON	HQ	V CASSINELLA	NAGW 422	8679
11	UNIV WISC-MADISON	G C CLAYTON	HQ	J S MATHIS	NAGW 1768	8682
11	UNIV WISC-MADISON	G R RIEGLER	HQ	J J MACFARLANE	NAGW 2210	8687
11	UNIV WISC-MADISON	G S KUTTER	HQ	L S SPARKE	NAGW 2420	8689
11	UNIV WISC-MADISON	G S KUTTER	HQ	J A CARDELLI	NAGW 2520	8690
11	UNIV WISC-MADISON	G S KUTTER	HQ	D P COX	NAGW 2532	8691
11	UNIV WISC-MADISON	G S KUTTER	HQ	H B OGELMAN	NAGW 2643	8693
11	UNIV WISC-MADISON	R STACHNIK	HQ	J E LAWLER	NAGW 2908	8697
11	UNIV WISC-MADISON	R STACHNIK	HQ	K BJORKMAN	NAGW 2921	8698
11	UNIV WISC-MADISON	H C BRINTON	HQ	F SCHERH	NAGW 3319	8705
11	UNIV WISC-MADISON	R V STACHNIK	HQ	C L JOSEPH	NAGW 3660	8707
11	UNIV WISC-MADISON	R V STACHNIK	HQ	J S MATHIS	NAGW 3833	8711
11	UNIV WISC-MADISON	J H RAHE	HQ	E CHURCHWELL	NAGW 3877	8712
11	UNIV WISC-MADISON	R V STACHNIK	HQ	C L JOSEPH	NAGW 4100	8722
11	UNIV WISC-MADISON	S C DUNKER	GSFC	W T DUNKER	NAS 5-26078	8726
11	UNIV WISC-MADISON	J H OWENS	MSFC	A D COPE	NAS 5-26777	8727
11	UNIV WISC-MADISON	H D VITAGLIANO	GSFC	F ROESLER	NAS 5-30131	8728
11	UNIV WISC-MADISON	D WEST	GSFC	P WANG	NAS 5-32646	8733
11	UNIV WISC-MADISON	R R JAYRO	MSFC	W T SANDERS	NAS 8-38664	8736
11	UNIV WISC-MADISON	J K ALEXANDER	HQ	K H NORDSIECK	NGT 00-050-666	8746
11	UNIV WISC-MADISON	J K ALEXANDER	HQ	B D SAVAGE	NGT 00-051-003	8748
11	UNIV WISC-MADISON	D HOLLAND	HQ	E CHURCHWELL	NGT 00-051-132	8750
11	UNIV OF WYOMING	C D LAUGHLIN	ARC	H A THRONSON JR	NAG 2-134	8768
11	UNIV OF WYOMING	C D LAUGHLIN	ARC	C E WOODWARD	NAG 2-755	8769
11	UNIV OF WYOMING	R PETRE	GSFC	H THRONSON	NAG 5-2709	8772
11	UNIV OF WYOMING	H C BRINTON	HQ	R R HOWELL	NAGW 1276	8776
11	U PUERTO RICO-MAYAGZ	F SIX	MSFC	J MACARI	NAG 8-193	8788
11	CURTIN UNIV OF TECH	L J KALUZIENSKI	HQ	J D BIGGS	NAGW 3760	8817
12	TUSKEGEE UNIVERSITY	K THOMPSON	KSC	N VAHDAT	NAG10-125	1063
12	UNIV ALA-BIRMINGHAM	M MEYER	HQ	J C LACEY	NAGW 1512	1067
12	UNIV ALA-HUNTSVILLE	R S SNYDER	MSFC	J M VAN ALSTINE	NAG 8-955	1116
12	UNIV ALA-HUNTSVILLE	F C OWENS	HQ	J M HARRIS	NGT 00-050-753	1173
12	UNIV ALA-HUNTSVILLE	D K RUSSELL	HQ	J C GREGORY	NGT 00-070-390	1184
12	ARIZONA STATE UNIV	S CHANG	ARC	J R CRONIN	NCA 2-787	1328
12	UNIV OF ARIZONA	I D BROWNE	JSC	M J DRAKE	NAG 9-39	1405
12	UNIV OF ARIZONA	P ROGERS	HQ	J H BLACK	NAGW 4126	1509
12	CALIF INST OF TECH	H ASHKENAS	JPL	M OKUMURA	NGT 00-050-727	1697
12	CALIF INST OF TECH	F C OWENS	HQ	E M STOLPER	NGT 00-050-800	1699
12	CALIF INST OF TECH	H ASHKENAS	JPL	M OKUMURA	NGT 00-050-890	1702
12	CALIF INST OF TECH	D HOLLAND	HQ	D BURNETT	NGT 00-051-084	1706
12	CALIF INST OF TECH	C HIX	JPL	G A BLAKE	NGT 00-051-276	1711
12	CAL STATE U-HAYWARD	M MOORE	ARC	S B OPPENBEIMER	NGT 00-070-274	1744
12	SAN FRAN STATE UNIV	G CARLE	ARC	J ORENBURG	NCA 2-712	1792
12	SAN JOSE STATE UNIV	M GOLUB	ARC	J J PESEK	NCA 2-720	1819

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
12	SONOMA STATE UNIV	D WEST	GSFC	L R COMINSKY	NAG 5-1260	1873
12	UNIV CALIF-BERKELEY	R OLIVERSEN	GSFC	S YENNEZ	NAG 5-2636	2103
12	UNIV CALIF-BERKELEY	J D RUMMEL	HQ	R J SAYKALLY	NAGW 2763	2191
12	UNIV CALIF-BERKELEY	F C OWENS	HQ	B SADOULET	NGT 00-050-462	2207
12	UNIV CALIF-BERKELEY	J K ALEXANDER	HQ	R J SAYKALLY	NGT 00-050-939	2218
12	UNIV CALIF-DAVIS	J D RUMMEL	HQ	D W DEAMER	NAGW 1119	2254
12	UNIV CALIF-DAVIS	J H RAHE	HQ	W JACKSON	NAGW 4016	2257
12	UNIV CALIF-L ANGELES	N H HAGEDORN	LERC	B S DUNN	NAG 3-1290	2357
12	UNIV CALIF-L ANGELES	I D BROWNE	JSC	J F KERRIDGE	NAG 9-27	2390
12	UNIV CALIF-L ANGELES	J D RUMMEL	HQ	J F KERRIDGE	NAGW 347	2395
12	UNIV CALIF-RIVERSIDE	B J HERREN	MSFC	A MCPHERSON	NAG 8-956	2489
12	UNIV CALIF-RIVERSIDE	B J HERRON	MSFC	A MCPHERSON	NAG 8-957	2490
12	UNIV CALIF-RIVERSIDE	R KING	MSFC	A MCPHERSON	NAS 8-39763	2492
12	UNIV CALIF-SAN DIEGO	I D BROWNE	JSC	J R ARNOLD	NAG 9-33	2532
12	UNIV CALIF-SAN FRAN	S CHANG	ARC	A POHORILLE	NCA 2-726	2622
12	UNIV CALIF-SAN FRAN	S CHANG	ARC	A POHORILLE	NCA 2-792	2623
12	UNIV CALIF-SAN FRAN	S CHANG	ARC	A POHORILLE	NCC 2-772	2627
12	UNIV CALIF-SAN FRAN	S CHANG	ARC	A POHORILLE	NCC 2-5073	2629
12	UNIV CALIF-SAN FRAN	S CHANG	ARC	A KANAVARIOTI	NCA 2-650	2686
12	UNIV CALIF-S CRUZ	S CHANG	ARC	A KANAVARIOTI	NCC 2-534	2691
12	UNIV CALIF-S CRUZ	S CHANG	ARC	A KANAVARIOTI	NCC 2-534	2691
12	UNIV COLORADO-BOLDR	J ALEXANDER	HQ	M TOLBERT	NGT 00-050-923	3086
12	UNIV COLORADO-BOLDR	G LESANE	HQ	M A TOLBERT	NGT 00-051-135	3096
12	YALE UNIVERSITY	M J RABINOWITZ	LERC	M D SMOOKE	NAG 3-1195	3153
12	CATHOLIC UNIVERSITY	D WEST	GSFC	F C BRUHWELLER	NAG 5-2126	3265
12	CATHOLIC UNIVERSITY	L J STIEF	GSFC	F L NESBITT	NCC 5-68	3268
12	CATHOLIC UNIVERSITY	D F NAVA	GSFC	D GUIMAN	NSG-5173	3272
12	FLORIDA STATE UNIV	M C LEE	HQ	E MANOUSAKIS	NAGW 3326	3355
12	UNIV OF CENTRAL FLA	P WELCH	KSC	C A CLAUSEN	NAG10-94	3373
12	UNIV OF FLORIDA	C M WONG	ARC	R A YOST	NAG 2-837	3403
12	UNIV OF FLORIDA	H L NGUYEN	LERC	G J MICKLOW	NAG 3-1113	3405
12	UNIV OF FLORIDA	M A MEADOR	LERC	R S DURAN	NCC 3-255	3441
12	UNIV OF FLORIDA	K W STREET	LERC	S P TANNER	NCC 3-346	3503
12	UNIV OF WEST FLORIDA	P R PROKOPIUS	LERC	J L REED	NAG 3-1080	3505
12	CLARK ATLANTA UNIV	B DONN	GSFC	R H NELSON	NAG 5-496	3617
12	GEORGIA SOUTHERN COL	J D RUMMEL	HQ	T C OWEN	NAGW 2631	3705
12	UNIV OF HAWAII-MANOA	L E MOORE	MSFC	W D SPROUL	NAG 8-1020	3799
12	NORTHWESTERN UNIV	S R LANGHOFF	ARC	G C SCHATZ	NCC 2-774	3818
12	NORTHWESTERN UNIV	D K RUSSELL	HQ	T MARKS	NGT 00-070-355	3828
12	NORTHWESTERN UNIV	J R VALENTIN	ARC	J B PHILLIPS	NCA 2-718	3831
12	SO ILL UNIV-CARBONDL	F C OWENS	HQ	J B PHILLIPS	NGT 00-070-233	3834
12	SO ILL UNIV-CARBONDL	C HUNG	LERC	E G MILLER	NCC 3-317	4037
12	MANCHESTER COLLEGE	A F HEPP	LERC	C P KUBIAK	NAG 3-1336	4064
12	PURDUE UNIVERSITY	A F HEPP	LERC	P E FANWICK	NCC 3-246	4095
12	PURDUE UNIVERSITY	F C OWENS	HQ	C P KUBIAK	NGT 00-050-634	4099
12	PURDUE UNIVERSITY	F C OWENS	HQ	E R GRANT	NGT 00-070-139	4112
12	PURDUE UNIVERSITY	T Y MILLER	MSFC	D T LEIGHTON	NAG 8-1080	4129
12	UNIV OF NOTRE DAME	J W KELLER	GSFC	J WEINER	NAG 5-1966	4576
12	UNIV MARYLAND-COL PK	J C PEARL	GSFC	R K KHANNA	NAG 5-2647	4610
12	UNIV MARYLAND-COL PK	J D RUMMEL	HQ	C PONNAMPERUMA	NAGW 1895	4626
12	UNIV MARYLAND-COL PK	D K RUSSELL	HQ	J VINCENT	NGT 00-070-331	4733
12	U OF MD BALTIMOR CTY	F MONTEGANI	LERC	A R BARRON	NGT 00-050-942	4848
12	HARVARD UNIVERSITY	R C DARTY	MSFC	J SZEKELY	NAG 8-970	4961
12	MASS INST OF TECH	R C DARTY	MSFC	J SZEKELY	NAG 8-1078	4965
12	MASS INST OF TECH	F C OWENS	HQ	M G KANATZIDIS	NGT 00-050-831	5175
12	MICHIGAN STATE UNIV	W E HOWELL	LARC	F E FILISKO	NAG 1-1565	5209
12	UNIV MICH-ANN ARBOR	J D RUMMEL	HQ	J C WALKER	NAGW 176	5257
12	UNIV MICH-ANN ARBOR	S R LANGHOFF	ARC	D G TRUHLAR	NAG 2-880	5373
12	U MINN-MNPLS-ST PAUL	E C ETHRIDGE	MSFC	C S RAY	NAG 8-898	5502
12	UNIV MO-ROLLA	M MEYER	HQ	E L SHOCK	NAGW 2818	5525
12	WASHINGTON UNIVERSTY	W L QUAIDE	HQ	R W WALKER	NAGW 2836	5526
12	WASHINGTON UNIVERSTY	W L QUAIDE	HQ	R W WALKER	NAGW 2836	5526

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
12	WASHINGTON UNIVERSITY	W V JONES	HQ	J KLARMAN	NAGW 3424	5540
12	RUTGERS ST U-PISCTWY	M L PUSEY	MSFC	J M WIENCEK	NAG 8-975	5805
12	CORNELL UNIVERSITY	J RUMMEL	HQ	D A USHER	NAGW 493	6051
12	CORNELL UNIVERSITY	M MEYER	HQ	C SAGAN	NAGW 1896	6058
12	CORNELL UNIVERSITY	P ROGERS	HQ	R POHL	NAGW 4062	6090
12	POLYTECHNIC U	R L KROES	MSFC	A S MYERSON	NAG 8-960	6145
12	RENSSELAER POLY-NY	J W CONNELL	LARC	J V CRIVELLO	NAG 1-980	6149
12	RENSSELAER POLY-NY	D L PALUMBO	LARC	J HADDOCK	NAG 1-1469	6153
12	RENSSELAER POLY-NY	D J LARKIN	LERC	L V INTERRANTE	NAG 3-1565	6162
12	RENSSELAER POLY-NY	J D RUMMEL	HQ	J P FERRIS	NAGW 2781	6168
12	RENSSELAER POLY-NY	F C OWENS	HQ	J P FERRIS	NGT 00-050-602	6180
12	RENSSELAER POLY-NY	J ALEXANDER	HQ	J P FERRIS	NGT 00-050-918	6181
12	DUKE UNIVERSITY	M C LEE	HQ	H MEYER	NAGW 3328	6334
12	UNIV N CAR-CHPL HILL	D HOLLAND	HQ	R E MILLER	NGT 00-051-288	6447
12	WAKE FOREST UNIV	D H PHILLIPS	LARC	C F JACKELS	NCC 1-55	6453
12	BALDWIN-WALLACE COL	K W STREET	LERC	J GORSE	NCC 3-268	6465
12	BALDWIN-WALLACE COL	E G WINTUCKY	LERC	J W MCCARGAR	NCC 3-300	6466
12	CASE WESTERN RESERVE	R S BALDWIN	LERC	G KLOPMAN	NAG 3-1282	6489
12	CASE WESTERN RESERVE	M J RABINOWITZ	LARC	J M PRAHL	NCC 3-85	6514
12	CASE WESTERN RESERVE	M A MEADOR	LERC	C N JUENIK	NCC 3-112	6518
12	CASE WESTERN RESERVE	C H UANG	LERC	J B LANDO	NCC 3-152	6525
12	CASE WESTERN RESERVE	F C OWENS	HQ	W YOUNGS	NGT 00-050-375	6556
12	CASE WESTERN RESERVE	C HIX	JPL	G KLOPMAN	NGT 00-051-041	6562
12	CASE WESTERN RESERVE	F J MONTEGANI	LERC	D SCHERSON	NGT 00-070-281	6570
12	CLEVELAND STATE UNIV	R L DAVIES	LERC	R G MEGARGLE	NCC 3-122	6604
12	CLEVELAND STATE UNIV	A F HEPP	LERC	S A DURAJ	NCC 3-162	6608
12	OHIO UNIVERSITY	M A MEADOR	LERC	D A GULING	NCC 3-194	6738
12	UNIV OF AKRON	P M HERGENROTHER	LARC	F W HARRIS	NAG 1-448	6741
12	UNIV OF AKRON	M A MEADOR	LERC	W J YOUNGS	NCC 3-225	6774
12	UNIV OF TOLEDO	M J RABINOWITZ	LERC	K J DEWITT	NAG 3-1307	6847
12	UNIV OKLAHOMA-NORMAN	J D RUMMEL	HQ	M H ENGEL	NAGW 2765	6902
12	UNIV OF TULSA	F SIX	MSFC	L DUNCAN	NAG 8-1005	6909
12	OREGON STATE UNIV	J D RUMMEL	HQ	B R SIMONEIT	NAGW 2833	6931
12	LEHIGH UNIVERSITY	D M KORNFIELD	MSFC	J W VANDERHOFF	NAG 8-972	7034
12	PENN STATE U-UNIV PK	M J RABINOWITZ	LERC	M Y FRENKLACH	NAG 3-991	7068
12	PENN STATE U-UNIV PK	F MONTEGANI	LERC	H R ALLOCK	NGT 00-051-131	7192
12	BROWN UNIVERSITY	F C OWENS	HQ	C M PIETERS	NGT 00-050-558	7296
12	VANDERBILT UNIVERSITY	R C DARTY	MSFC	R J BAYUZICK	NAG 8-978	7465
12	SW TEXAS STATE UNIV	A K ST CLAIR	LARC	P E CASSIDY	NAG 1-631	7585
12	SW TEXAS STATE UNIV	E J PRIOR	LARC	P E CASSIDY	NGT 00-070-271	7586
12	TEXAS A&M UNIVERSITY	M MOORE	ARC	M B HALL	NGT 00-051-337	7676
12	TEXAS SOUTHERN UNIV	D S MCKAY	JSC	B L WILSON	NAG 9-299	7696
12	UNIV HOUSTON	J D RUMMEL	HQ	J ORO	NAGW 2788	7744
12	UNIV HOUSTON	D HOLLAND	HQ	G E FOX	NGT 00-051-085	7751
12	UNIV TEXAS-AUSTIN	J K ALEXANDER	HQ	T KODADEK	NGT 00-050-869	7921
12	COLLEGE OF WM & MARY	E R LONG	LARC	D E KRANBUEHL	NAG 1-237	8060
12	COLLEGE OF WM & MARY	E R LONG	LARC	D E KRANBUEHL	NAG 1-1019	8063
12	COLLEGE OF WM & MARY	P R YOUNG	LARC	R A OKWALL	NAG 1-1548	8067
12	COLLEGE OF WM & MARY	S T LONG	LARC	R L KIEFER	NCC 1-126	8077
12	COLLEGE OF WM & MARY	L EVANS	LARC	R A ORWOLL	NGT 00-051-258	8083
12	COLLEGE OF WM & MARY	F C OWENS	HQ	R A ORWOLL	NGT 00-070-211	8084
12	HAMPTON UNIVERSITY	P M HERGENROTHER	LARC	G NWOKOGU	NAG 1-905	8107
12	NORFOLK STATE UNIV	P R YOUNG	LARC	L MATTIX	NAG 1-1453	8124
12	OLD DOMINION UNIV	L EVANS	LARC	J B COOPER	NGT 00-051-253	8192
12	UNIV OF VIRGINIA	F C OWENS	HQ	S A MACKO	NGT 00-050-775	8278
12	VIRGINIA POLY INST	P M HERGENROTHER	LARC	G L WILKES	NAG 1-1101	8321
12	VIRGINIA POLY INST	W S SLEMP	LARC	J P WIGHTMAN	NAG 1-1186	8324
12	VIRGINIA COMMONWLT U	P M HERGENROTHER	LARC	R G BASS	NAG 1-1251	8408
12	UNIV OF WASHINGTON	B MCLACHLAN	ARC	M GOUTERMAN	NCA 2-485	8517
12	UNIV OF WASHINGTON	B MCLACHLAN	ARC	M GOUTERMAN	NCA 2-658	8519

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
12	UNIV OF WASHINGTON	B MCLACHLAN	ARC	M GOUTERMAN	NCA 2-2002	8521
12	UNIV OF WASHINGTON	F C OWENS	HQ	M GOUTHERMAN	NGT 00-050-561	8545
12	UNIV OF WASHINGTON	B HASTINGS	ARC	M GOUTERMAN	NGT 00-050-933	8554
12	UNIV WISC-MADISON	W B ALSTON	LERC	J P DROSKE	NAG 3-1209	8630
12	U PUERTO RICO-MAYAGZ	B PENN	MSFC	A LEYDERMAN	NCC 8-37	8793
12	UNIV OF QUEENSLAND	P R YOUNG	LARC	J H O'DONNELL	NAGW 2495	8819
13	ALABAMA A&M UNIV	G ADAMOUSKY	LERC	P VENKATESWARLU	NAG 3-1408	1000
13	ALABAMA A&M UNIV	J L RANDALL	MSFC	M C GEORGE	NAG 8-107	1003
13	ALABAMA A&M UNIV	J L RANDALL	MSFC	M D AGGARWAL	NAG 8-125	1004
13	ALABAMA A&M UNIV	G FICHTL	MSFC	K J CHANG	NAG 8-173	1005
13	ALABAMA A&M UNIV	G H FICHTL	MSFC	R B LAL	NAG 8-203	1009
13	ALABAMA A&M UNIV	G A FICHTL	MSFC	R B LAL	NAG 8-251	1011
13	ALABAMA A&M UNIV	K R TAYLOR	MSFC	P VENKATESWARLU	NAG 8-907	1012
13	ALABAMA A&M UNIV	G H FICHTL	MSFC	P VENKATESWARLU	NCC 8-27	1017
13	AUBURN UNIV-AUBURN	E C WHIPPLE	HQ	S F KNOWLTON	NAGW 4005	1031
13	AUBURN UNIV-AUBURN	M J CINTALA	JSC	M F ROSE	NCC 9-27	1035
13	AUBURN UNIV-AUBURN	F SIX	MSFC	J D PEREZ	NGT 00-051-046	1041
13	TUSKEGEE UNIVERSITY	V K RAWLIN	LERC	P K RAY	NAG 3-1388	1056
13	UNIV ALA-BIRMINGHAM	P A CURRERI	MSFC	T J WDOWIAK	NAG 8-928	1064
13	UNIV ALA-BIRMINGHAM	F C GILLET	HQ	T J WDOWIAK	NAGW 749	1065
13	UNIV ALA-BIRMINGHAM	M MEYER	HQ	T J WDOWIAK	NAGW 4079	1071
13	UNIV ALA-BIRMINGHAM	M L PUSEY	MSFC	L J DELUCAS	NAS 8-39766	1076
13	UNIV ALA-BIRMINGHAM	F SIX	MSFC	D G AGRESTI	NGT 00-050-879	1080
13	UNIV ALA-BIRMINGHAM	F SIX	MSFC	D L SHEALY	NGT 00-050-880	1081
13	UNIV ALA-HUNTSVILLE	D B SNYDER	LERC	N SINGH	NAG 3-1373	1085
13	UNIV ALA-HUNTSVILLE	T E MOORE	MSFC	R H COMFORT	NAG 8-239	1101
13	UNIV ALA-HUNTSVILLE	S L LEHOCZKY	MSFC	E E ANDERSON	NAG 8-767	1104
13	UNIV ALA-HUNTSVILLE	T E MOORE	MSFC	G R WILSON	NAG 8-822	1106
13	UNIV ALA-HUNTSVILLE	J M DAVIS	MSFC	Z MUSIELAK	NAG 8-839	1108
13	UNIV ALA-HUNTSVILLE	J W KAUFMAN	MSFC	R J HUNG	NAG 8-938	1114
13	UNIV ALA-HUNTSVILLE	H S AHLUWALIA	HQ	S T WU	NAGW 9	1126
13	UNIV ALA-HUNTSVILLE	H S AHLUWALIA	HQ	A G EMSLIE	NAGW 294	1127
13	UNIV ALA-HUNTSVILLE	M M MELLOTT	HQ	P G RICHARDS	NAGW 996	1129
13	UNIV ALA-HUNTSVILLE	M M MELLOTT	HQ	J L HORWITZ	NAGW 1554	1130
13	UNIV ALA-HUNTSVILLE	M M MELLOTT	HQ	R H COMFORT	NAGW 1630	1131
13	UNIV ALA-HUNTSVILLE	M M MELLOTT	HQ	Y TAKAHASHI	NAGW 1651	1132
13	UNIV ALA-HUNTSVILLE	M M MELLOTT	HQ	J C GREGORY	NAGW 2023	1133
13	UNIV ALA-HUNTSVILLE	W V JONES	HQ	N SINGH	NAGW 2128	1134
13	UNIV ALA-HUNTSVILLE	M M MELLOTT	HQ	N SINGH	NAGW 2903	1137
13	UNIV ALA-HUNTSVILLE	J D BOHLIN	HQ	N SINGH	NAGW 2971	1139
13	UNIV ALA-HUNTSVILLE	W J WAGNER	HQ	M MACHADO	NAGW 3470	1140
13	UNIV ALA-HUNTSVILLE	E C WHIPPLE	HQ	G R WILSON	NAGW 3540	1141
13	UNIV ALA-HUNTSVILLE	W V JONES	HQ	Y TAKAHASHI	NAGW 3617	1142
13	UNIV ALA-HUNTSVILLE	W J WAGNER	HQ	A G EMSLIE	NAGW 3692	1144
13	UNIV ALA-HUNTSVILLE	M M MELLOTT	HQ	D G TORR	NAGW 3979	1145
13	UNIV ALA-HUNTSVILLE	M M MELLOTT	HQ	M P HICKEY	NAGW 4086	1146
13	UNIV ALA-HUNTSVILLE	E C WHIPPLE	HQ	N SINGH	NAS 8-38145	1152
13	UNIV ALA-HUNTSVILLE	G H FICHTAL	MSFC	M R TORR	NGT 00-050-866	1174
13	UNIV ALA-HUNTSVILLE	F SIX	MSFC	A G EMSLIE	NGT 00-051-031	1176
13	UNIV ALA-HUNTSVILLE	M BURRELL	GSFC	R T MCNIDER	NGT 00-051-299	1178
13	UNIV ALA-HUNTSVILLE	D HOLLAND	HQ	J L HORWITZ	NGT 00-051-355	1179
13	UNIV ALA-HUNTSVILLE	J LYNCH	HQ	J I ALEXANDER	NAG 8-279	1200
13	UNIV ALA-TUSCALOOSA	W T POWERS	MSFC	K W WHITAKER	NAG 5-693	1223
13	UNIV ALASKA-FAIRBNKS	L J EARLY	GSFC	C S DEEHR	NAG 5-1097	1226
13	UNIV ALASKA-FAIRBNKS	S A CURTIS	GSFC	M H REES	NAG 5-1504	1227
13	UNIV ALASKA-FAIRBNKS	T J BIRMINGHAM	GSFC	L C LEE	NAG 5-1915	1229
13	UNIV ALASKA-FAIRBNKS	G D BULLOCK	GSFC	J D CRAVEN	NAG 5-5000	1231
13	UNIV ALASKA-FAIRBNKS	L J EARLY	GSFC	E WESCOTT	NAG 5-5012	1232
13	UNIV ALASKA-FAIRBNKS	L J EARLY	GSFC	D D SENTMAN	NAG 5-5019	1234
13	UNIV ALASKA-FAIRBNKS	L J EARLY	GSFC	D D SENTMAN	NAGW 1342	1236
13	UNIV ALASKA-FAIRBNKS	M M MELLOTT	HQ	J G ROEDERER		

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	UNIV ALASKA-FAIRBNKS	D L REASONER	HQ	T J HALINAN	NAGW 2857	1246
13	UNIV ALASKA-FAIRBNKS	D L REASONER	HQ	D LUMMERZHEIM	NAGW 3037	1248
13	UNIV ALASKA-FAIRBNKS	M M MELLOTT	HQ	J D CRAVEN	NAGW 3436	1249
13	UNIV ALASKA-FAIRBNKS	E C WHIPPLE	HQ	J D CRAVEN	NAGW 3441	1250
13	UNIV ALASKA-FAIRBNKS	E C WHIPPLE	HQ	S AKASOFU	NAGW 3663	1251
13	UNIV ALASKA-FAIRBNKS	R HOWARD	HQ	H C STENBAEK-NIELSEN	NAGW 4048	1254
13	UNIV OF ARIZONA	L J EARLY	GSFC	A L BROADFOOT	NAG 5-637	1373
13	UNIV OF ARIZONA	T J BIRMINGHAM	GSFC	J R JOKIPII	NAG 5-2251	1383
13	UNIV OF ARIZONA	J C LING	HQ	J R JOKIPII	NAGW 1931	1432
13	UNIV OF ARIZONA	M D BICAY	HQ	W F HOFFMAN	NAGW 2357	1450
13	UNIV OF ARIZONA	W V JONES	HQ	J KOTA	NAGW 2549	1458
13	UNIV OF ARIZONA	E C WHIPPLE	HQ	F HERBERT	NAGW 3440	1487
13	UNIV OF ARIZONA	E C WHIPPLE	HQ	C CURTIS	NAGW 3635	1495
13	UNIV OF ARIZONA	W V JONES	HQ	A BROADFOOT	NAGW 3657	1497
13	UNIV OF ARIZONA	F C OWENS	HQ	S SOROOSHIAN	NGT 00-050-626	1539
13	UNIV OF ARIZONA	F C OWENS	HQ	U FINK	NGT 00-050-661	1540
13	UNIV OF ARIZONA	D HOLLAND	HQ	F MELIA	NGT 00-051-304	1560
13	UNIV ARKANSAS-LTL RK	W W ST. CYR	SSC	K HUDSON	NAG13-26	1579
13	CALIF INST OF TECH	R C DARTY	MSFC	W L JOHNSON	NAG 8-954	1621
13	CALIF INST OF TECH	J D BOHLIN	HQ	H ZIRIN	NAGW 1972	1638
13	CALIF INST OF TECH	J K ALEXANDER	HQ	R A MEWALDT	NAGW 2806	1655
13	CALIF INST OF TECH	W J WAGNER	HQ	D GARY	NAGW 3005	1660
13	CALIF INST OF TECH	W V JONES	HQ	E C STONE	NAGW 3012	1662
13	CALIF INST OF TECH	W J WAGNER	HQ	P GOLDBREICH	NAGW 3018	1663
13	CALIF INST OF TECH	W J WAGNER	HQ	G J HURFORD	NAGW 3994	1682
13	CALIF INST OF TECH	W J WAGNER	HQ	K G LIBBRECHT	NAGW 4058	1686
13	CALIF INST OF TECH	D E NEW	HQ	T HAMILTON	NAGW 4110	1687
13	CALIF INST OF TECH	J LAUDADIO	GSFC	E STONE	NAS 5-31459	1690
13	CALIF INST OF TECH	A ASHKENAS	JPL	G NEUGEBAVER	NGT 00-050-893	1704
13	CALIF INST OF TECH	D HOLLAND	HQ	R MEWALDT	NGT 00-051-156	1707
13	CALIF INST OF TECH	F SIX	MSFC	T A PRINCE	NGT 00-051-184	1708
13	CALIF INST OF TECH	F SIX	MSFC	J CARLSTROM	NGT 00-051-201	1709
13	CALIF INST OF TECH	G SOFFEN	GSFC	T G PHILLIPS	NGT 00-051-212	1710
13	CALIF INST OF TECH	J K ALEXANDER	HQ	R A HREWALDS	NGT 00-070-287	1714
13	CAL STATE U-LG BEACH	N R HALL	LERC	J LIU	NAG 3-1634	1752
13	CAL STATE U-NRTHRDE	W J WAGNER	HQ	G A CHAPMAN	NAGW 2770	1758
13	SAN JOSE STATE UNIV	J VALENTIN	ARC	J F BECKER	NCA 2-651	1815
13	SAN JOSE STATE UNIV	B TOON	ARC	P HAMILL	NCA 2-710	1818
13	SAN JOSE STATE UNIV	F C OWENS	HQ	J F BECKER	NGT 00-070-227	1860
13	STANFORD UNIVERSITY	S R LANGHOFF	ARC	C H KRUGER	NAG 2-910	1895
13	STANFORD UNIVERSITY	L J EARLY	GSFC	J G TIMOTHY	NAG 5-664	1903
13	STANFORD UNIVERSITY	S M WANDER	HQ	D R CHAPMAN	NAGW 965	1914
13	STANFORD UNIVERSITY	M M MELLOTT	HQ	U S INAN	NAGW 1582	1916
13	STANFORD UNIVERSITY	M M MELLOTT	HQ	R A HELLIWELL	NAGW 1680	1917
13	STANFORD UNIVERSITY	M M MELLOTT	HQ	J R SPREITER	NAGW 1790	1918
13	STANFORD UNIVERSITY	J D BOHLIN	HQ	V PETROSIAN	NAGW 1976	1921
13	STANFORD UNIVERSITY	W WAGNER	HQ	P A STURROCK	NAGW 2265	1924
13	STANFORD UNIVERSITY	L J KALUZIENSKI	HQ	P A STURROCK	NAGW 2290	1925
13	STANFORD UNIVERSITY	J K ALEXANDER	HQ	A B WALKER	NAGW 2776	1929
13	STANFORD UNIVERSITY	B M CARPENTER	HQ	C W EVERITT	NAGW 2793	1930
13	STANFORD UNIVERSITY	D L RESONER	HQ	U INAN	NAGW 2871	1931
13	STANFORD UNIVERSITY	C POE	LARC	G S SPRINGER	NAS 1-18778	1941
13	STANFORD UNIVERSITY	J GERVIN	GSFC	R H SCHERRER	NAS 5-30386	1943
13	STANFORD UNIVERSITY	J S RICHARDS	MSFC	C W EVERITT	NAS 8-36125	1946
13	STANFORD UNIVERSITY	F C OWENS	HQ	A B WALKER	NGT 00-050-774	2018
13	STANFORD UNIVERSITY	J K ALEXANDER	HQ	J A LIPA	NGT 00-050-856	2020
13	STANFORD UNIVERSITY	J ALEXANDER	HQ	V PETROSIAN	NGT 00-050-938	2022
13	STANFORD UNIVERSITY	D A HOLLAND	HQ	J LIPA	NGT 00-051-153	2026
13	STANFORD UNIVERSITY	F C OWENS	HQ	V PETROSIAN	NGT 00-070-178	2032
13	STANFORD UNIVERSITY	F C OWENS	HQ	A WALKER	NGT 00-070-182	2033

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	STANFORD UNIVERSITY	F C OWENS	HQ	R V WAGONER	NGT 00-070-194	2035
13	STANFORD UNIVERSITY	G SOFFEN	GSFC	A B WALKER	NGT 00-070-284	2039
13	STANFORD UNIVERSITY	D K RUSSELL	HQ	A WALKER	NGT 00-070-364	2045
13	STANFORD UNIVERSITY	L J EARLY	GSFC	A B WALKER	NSG-5131	2049
13	UNIV CALIF-BERKELEY	C R MCCREIGHT	ARC	P L RICHARDS	NAG 2-711	2055
13	UNIV CALIF-BERKELEY	L J EARLY	GSFC	C S BOWYER	NAG 5-696	2061
13	UNIV CALIF-BERKELEY	M H ACUNA	GSFC	R P LIN	NAG 5-959	2062
13	UNIV CALIF-BERKELEY	W V JONES	HQ	H J CRAWFORD	NAGW 1503	2112
13	UNIV CALIF-BERKELEY	M M MELLOTT	HQ	F S MOZER	NAGW 1626	2114
13	UNIV CALIF-BERKELEY	M M MELLOTT	HQ	K A ANDERSON	NAGW 1795	2115
13	UNIV CALIF-BERKELEY	W V JONES	HQ	P B PRICE	NAGW 2000	2117
13	UNIV CALIF-BERKELEY	W V JONES	HQ	P B PRICE	NAGW 2104	2119
13	UNIV CALIF-BERKELEY	W J WAGNER	HQ	K A ANDERSON	NAGW 2452	2123
13	UNIV CALIF-BERKELEY	W WAGNER	HQ	B B STARK	NAGW 2516	2125
13	UNIV CALIF-BERKELEY	L KALUZIENSKI	HQ	O H SIEGMOND	NAGW 2640	2127
13	UNIV CALIF-BERKELEY	W J WAGNER	HQ	G H FISHER	NAGW 3429	2143
13	UNIV CALIF-BERKELEY	M M MELLOTT	HQ	C A CATTELL	NAGW 3473	2144
13	UNIV CALIF-BERKELEY	M M MELLOTT	HQ	C A CATTELL	NAGW 3977	2160
13	UNIV CALIF-BERKELEY	M M MELLOTT	HQ	R P LIN	NAGW 3978	2161
13	UNIV CALIF-BERKELEY	D GALOPPO	GSFC	F S MOZER	NAS 5-30241	2167
13	UNIV CALIF-BERKELEY	F WAINSCOTT	GSFC	R LIN	NAS 5-30366	2168
13	UNIV CALIF-BERKELEY	W C ANSELM	GSFC	F S MOZER	NAS 5-30367	2169
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	F S MOZER	NGT 00-050-451	2206
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	S M KAHN	NGT 00-050-467	2208
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	P L RICHARDS	NGT 00-050-603	2209
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	R P LIN	NGT 00-050-607	2210
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	S M KAHN	NGT 00-050-613	2211
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	A E LANGE	NGT 00-050-771	2212
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	G F SMOOT	NGT 00-050-783	2213
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	S CHAKRABARTI	NGT 00-050-787	2214
13	UNIV CALIF-BERKELEY	F C OWENS	HQ	P B PRICE	NGT 00-050-913	2216
13	UNIV CALIF-BERKELEY	J ALEXANDER	HQ	O H SIEGMUND	NGT 00-051-062	2220
13	UNIV CALIF-BERKELEY	D HOLLAND	HQ	A E LANGE	NGT 00-051-076	2221
13	UNIV CALIF-BERKELEY	D HOLLAND	HQ	R PACKARD	NGT 00-051-269	2226
13	UNIV CALIF-BERKELEY	G LESANE	HQ	R P LIN	NGT 00-051-287	2228
13	UNIV CALIF-BERKELEY	D HOLLAND	HQ	F S MOZER	NGT 00-051-302	2229
13	UNIV CALIF-BERKELEY	D HOLLAND	HQ	G V HOVEN	NAG 5-2257	2316
13	UNIV CALIF-IRVINE	T J BIRMINGHAM	GSFC	S W BARWICK	NAGW 2487	2323
13	UNIV CALIF-IRVINE	W V JONES	HQ	N ROSTOKER	NAGW 2655	2324
13	UNIV CALIF-IRVINE	M M MELLOTT	HQ	G VAN HOVEN	NAGW 2791	2327
13	UNIV CALIF-IRVINE	W J WAGNER	HQ	S P RUDEN	NGT 00-050-932	2337
13	UNIV CALIF-IRVINE	M MOORE	ARC	C T RUSSELL	NAG 3-1503	2361
13	UNIV CALIF-L ANGELES	J M HICKMAN	LERC	R J STRONGWAY	NAG 5-863	2367
13	UNIV CALIF-L ANGELES	S A CURTIS	GSFC	M A ABDALLA	NAG 5-1100	2369
13	UNIV CALIF-L ANGELES	S A CURTIS	GSFC	M G KIVELSON	NAG 5-1167	2371
13	UNIV CALIF-L ANGELES	M ACUNA	GSFC	M ASHOUR-ABDALLA	NAG 5-1480	2375
13	UNIV CALIF-L ANGELES	T J BIRMINGHAM	GSFC	R ULRICH	NAGW 472	2396
13	UNIV CALIF-L ANGELES	J D BOHLIN	HQ	J G LUHMANN	NAGW 1347	2398
13	UNIV CALIF-L ANGELES	J T BERGSTRALH	HQ	R L STENZEL	NAGW 1570	2399
13	UNIV CALIF-L ANGELES	M M MELLOTT	HQ	C F KENNEL	NAGW 1624	2400
13	UNIV CALIF-L ANGELES	M M MELLOTT	HQ	J E MAGGS	NAGW 1635	2401
13	UNIV CALIF-L ANGELES	M M MELLOTT	HQ	K K KHURANA	NAGW 2047	2403
13	UNIV CALIF-L ANGELES	M M MELLOTT	HQ	R MCPHERRON	NAGW 2054	2404
13	UNIV CALIF-L ANGELES	M M MELLOTT	HQ	C T RUSSELL	NAGW 2067	2406
13	UNIV CALIF-L ANGELES	R D MCPETERS	HQ	R P TURCO	NAGW 2183	2410
13	UNIV CALIF-L ANGELES	M M MELLOTT	HQ	R PELLAT	NAGW 2620	2422
13	UNIV CALIF-L ANGELES	B M CARPENTER	HQ	S J PUTTERMAN	NAGW 2842	2424
13	UNIV CALIF-L ANGELES	M M MELLOTT	HQ	C C WU	NAGW 2848	2425
13	UNIV CALIF-L ANGELES	D L REASONER	HQ	R P TURCO	NAGW 2853	2426
13	UNIV CALIF-L ANGELES	E C WHIPPLE	HQ	D D BARBOSA	NAGW 3190	2434

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	UNIV CALIF-L ANGELES	H C BRINTON	HQ	J F KERRIDGE	NAGW 3349	2437
13	UNIV CALIF-L ANGELES	E C WHIPPLE	HQ	R M THORNE	NAGW 3476	2440
13	UNIV CALIF-L ANGELES	F C WHIPPLE	HQ	C T RUSSELL	NAGW 3477	2441
13	UNIV CALIF-L ANGELES	E C WHIPPLE	HQ	C T RUSSELL	NAGW 3948	2454
13	UNIV CALIF-L ANGELES	E C WHIPPLE	HQ	R RICHARD	NAGW 3955	2455
13	UNIV CALIF-L ANGELES	E C WHIPPLE	HQ	C T RUSSELL	NAGW 3974	2456
13	UNIV CALIF-L ANGELES	C R STOKER	ARC	F V CORONITI	NAGW 4130	2461
13	UNIV CALIF-L ANGELES	F C OWENS	HQ	G SCHUBERT	NCA 2-689	2469
13	UNIV CALIF-L ANGELES	J K ALEXANDER	HQ	M G KUELSON	NGT 00-050-618	2479
13	UNIV CALIF-L ANGELES	D HOLLAND	HQ	D A PAIGE	NGT 00-051-000	2481
13	UNIV CALIF-SAN DIEGO	T J BIRMINGHAM	GSFC	W GEKELMAN	NGT 00-051-148	2482
13	UNIV CALIF-SAN DIEGO	M M MELLOTT	HQ	N OMIDI	NAG 5-1492	2512
13	UNIV CALIF-SAN DIEGO	M M MELLOTT	HQ	E C WHIPPLE	NAGW 1150	2543
13	UNIV CALIF-SAN DIEGO	W V JONES	HQ	N OMIDI	NAGW 1806	2546
13	UNIV CALIF-SAN DIEGO	W J WAGNER	HQ	B V JACKSON	NAGW 2002	2549
13	UNIV CALIF-SAN DIEGO	W V JONES	HQ	H HUDSON	NAGW 2591	2557
13	UNIV CALIF-SAN DIEGO	M M MELLOTT	HQ	R E LINGENFELTER	NAGW 2609	2558
13	UNIV CALIF-SAN DIEGO	E C WHIPPLE	HQ	D KRAUSS-VARBAN	NAGW 2618	2559
13	UNIV CALIF-SAN DIEGO	E C WHIPPLE	HQ	J LINKER	NAGW 3179	2574
13	UNIV CALIF-SAN DIEGO	E C WHIPPLE	HQ	M E MCKEAN	NAGW 3975	2584
13	UNIV CALIF-SAN DIEGO	R K BOGUE	ARC	K B QUEST	NAGW 4018	2585
13	UNIV CALIF-SAN DIEGO	F C OWENS	HQ	R J CATTOLICA	NCC 2-718	2598
13	UNIV CALIF-SAN DIEGO	J K ALEXANDER	HQ	B JONES	NGT 00-050-776	2606
13	UNIV CALIF-SAN DIEGO	D HOLLAND	HQ	K QUEST	NGT 00-050-935	2608
13	UNIV CALIF-S BARBARA	T A MAXWELL	HQ	D A MENDIS	NGT 00-051-060	2609
13	UNIV CALIF-S BARBARA	L KALNZIENSKI	HQ	S J PEALE	NAGW 2061	2640
13	UNIV CALIF-S BARBARA	B M CARPENTER	HQ	P LUBIN	NAGW 2188	2641
13	UNIV CALIF-S BARBARA	M C LEE	HQ	L G LEAL	NAGW 2840	2647
13	UNIV CALIF-S BARBARA	R E MURPHY	HQ	G AHLERS	NAGW 3325	2651
13	UNIV CALIF-S BARBARA	D HOLLAND	HQ	P M LUBIN	NAGW 3350	2652
13	UNIV CALIF-S BARBARA	G LESANE	HQ	P M LUBIN	NGT 00-050-780	2669
13	UNIV SAN FRANCISCO	T A PARNELL	MSFC	G AHLERS	NGT 00-051-264	2670
13	UNIV SAN FRANCISCO	T A PARNELL	MSFC	E V BENTON	NAG 8-168	2704
13	UNIV SAN FRANCISCO	D S NACHTWEY	JSC	E V BENTON	NAG 8-282	2705
13	UNIV OF SOUTHERN CAL	L E LASHER	ARC	E V BENTON	NAG 9-235	2707
13	UNIV OF SOUTHERN CAL	L J EARLY	GSFC	D JUDGE	NAG 2-146	2711
13	UNIV OF SOUTHERN CAL	J D BOHLIN	HQ	D J JUDGE	NAG 5-5018	2723
13	UNIV OF SOUTHERN CAL	W V JONES	HQ	E J RHODES	NAGW 13	2724
13	UNIV OF SOUTHERN CAL	L J EARLY	GSFC	D L JUDGE	NAGW 2677	2731
13	COLORADO SCH OF MINE	S R LANGHOFF	ARC	D L JUDGE	NSG-5108	2757
13	COLORADO STATE UNIV	V K RAWLIN	LERC	M EBERHART	NAG 2-849	2760
13	UNIV COLORADO-BOLDR	J S LING	LERC	P J WILBUR	NAG 3-1206	2771
13	UNIV COLORADO-BOLDR	L J EARLY	GSFC	N A CLARK	NAG 3-1600	2842
13	UNIV COLORADO-BOLDR	L J EARLY	GSFC	T N WOODS	NAG 5-676	2847
13	UNIV COLORADO-BOLDR	T J BIRMINGHAM	GSFC	C A BARTH	NAG 5-698	2848
13	UNIV COLORADO-BOLDR	M ACUNA	GSFC	J T MOORE	NAG 5-2256	2883
13	UNIV COLORADO-BOLDR	L J EARLY	GSFC	D N BAKER	NAG 5-2664	2913
13	UNIV COLORADO-BOLDR	L J EARLY	GSFC	D C FRITTS	NAG 5-5014	2916
13	UNIV COLORADO-BOLDR	L J EARLY	GSFC	W C CASH	NAG 5-5020	2917
13	UNIV COLORADO-BOLDR	J KAUFMAN	MSFC	S C SOLOMON	NAG 5-5021	2918
13	UNIV COLORADO-BOLDR	M J KAVAVA	MSFC	J HART	NAG 8-190	2919
13	UNIV COLORADO-BOLDR	M M MELLOTT	HQ	R G FREHLICH	NAG 8-253	2921
13	UNIV COLORADO-BOLDR	J D BOHLIN	HQ	T W SPEISER	NAGW 1176	2940
13	UNIV COLORADO-BOLDR	J D BOHLIN	HQ	A L KIPLINGER	NAGW 1462	2944
13	UNIV COLORADO-BOLDR	M M MELLOTT	HQ	G A DULK	NAGW 1994	2953
13	UNIV COLORADO-BOLDR	D P HUENEMOERDER	HQ	S C SOLOMON	NAGW 2116	2955
13	UNIV COLORADO-BOLDR	W WAGNER	HQ	G CLAYTON	NAGW 2338	2961
13	UNIV COLORADO-BOLDR	M M MELLOTT	HQ	J L LINSKY	NAGW 2568	2967
13	UNIV COLORADO-BOLDR	W J WAGNER	HQ	F BAGENAL	NAGW 2684	2971
13	UNIV COLORADO-BOLDR		HQ	F BAGENAL	NAGW 2754	2975

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	UNIV COLORADO-BOLDR	D L REASONER	HQ	C BARTH	NAGW 2825	2976
13	UNIV COLORADO-BOLDR	D L REASONER	HQ	T J ROWELL	NAGW 2851	2977
13	UNIV COLORADO-BOLDR	M M MELLOTT	HQ	I DOXAS	NAGW 2968	2984
13	UNIV COLORADO-BOLDR	W J WAGNER	HQ	J TOOMRE	NAGW 2980	2986
13	UNIV COLORADO-BOLDR	W J WAGNER	HQ	K GAYLEY	NAGW 2994	2988
13	UNIV COLORADO-BOLDR	W J WAGNER	HQ	A KIPLINGER	NAGW 3030	2991
13	UNIV COLORADO-BOLDR	E C WHIPPLE	HQ	M HORANYI	NAGW 3355	3001
13	UNIV COLORADO-BOLDR	M M MELLOTT	HQ	M CODRESCU	NAGW 3530	3006
13	UNIV COLORADO-BOLDR	W J WAGNER	HQ	D J GALLAGHER	NAGW 4064	3023
13	UNIV COLORADO-BOLDR	E C WHIPPLE	HQ	N SCHNEIDER	NAGW 4145	3025
13	UNIV COLORADO-BOLDR	F C OWENS	HQ	T P SNOW	NGT 00-050-515	3068
13	UNIV COLORADO-BOLDR	F C OWENS	HQ	T P SNOW	NGT 00-050-660	3071
13	UNIV COLORADO-BOLDR	G SOFFEN	GSFC	R A MCCRAY	NGT 00-050-899	3082
13	UNIV COLORADO-BOLDR	J ALEXANDER	HQ	F BAGENAL	NGT 00-050-916	3085
13	UNIV COLORADO-BOLDR	J K ALEXANDER	HQ	W C CASH	NGT 00-050-955	3089
13	UNIV COLORADO-BOLDR	J K ALEXANDER	HQ	E ZWEIBEL	NGT 00-050-958	3090
13	UNIV COLORADO-BOLDR	F C OWENS	HQ	J T STOCKE	NGT 00-070-220	3108
13	YALE UNIVERSITY	J S LING	LERC	D E ROSNER	NAG 3-1654	3156
13	YALE UNIVERSITY	S H MOSELEY	GSFC	D E PROBER	NAG 5-1244	3157
13	YALE UNIVERSITY	T J BIRMINGHAM	GSFC	P DEMARQUE	NAG 5-1486	3158
13	YALE UNIVERSITY	F C OWENS	HQ	D E PROBER	NGT 00-050-586	3170
13	YALE UNIVERSITY	F C OWENS	HQ	L J GUIDO	NGT 00-050-832	3173
13	YALE UNIVERSITY	C HIX	JPL	D PROBER	NGT 00-051-037	3177
13	YALE UNIVERSITY	G SOFFEN	GSFC	D E PROBER	NGT 00-051-209	3178
13	UNIV OF DELAWARE	R A WILKINSON	LERC	E W KALER	NAG 3-1424	3183
13	UNIV OF DELAWARE	W V JONES	HQ	P EVENSON	NAGW 1040	3189
13	UNIV OF DELAWARE	M M MELLOTT	HQ	T K GAISSE	NAGW 1644	3190
13	HOWARD UNIVERSITY	W B SULLIVAN	GSFC	A N THORPE	NAG 5-1057	3241
13	HOWARD UNIVERSITY	N E MASSENBERS	HQ	A N THORNE	NAGW 2950	3244
13	AMERICAN UNIVERSITY	J WOLFGANG	GSFC	R B .	NCC 5-78	3252
13	AMERICAN UNIVERSITY	F C OWENS	HQ	R B KAY	NGT 00-050-649	3253
13	AMERICAN UNIVERSITY	G SOFFEN	GSFC	R B KAY	NGT 00-051-032	3254
13	CATHOLIC UNIVERSITY	R P LEPPING	GSFC	Y C WHANG	NAG 5-2445	3267
13	CATHOLIC UNIVERSITY	F C OWENS	HQ	F BRUHWEILER	NGT 00-070-043	3269
13	FLA INTERNATIONAL U	J J HILLMAN	GSFC	J W SHELDON	NAG 5-2583	3284
13	FLA INTERNATIONAL U	F SIX	MSFC	W V VAN HAMME	NAG 8-272	3285
13	FLORIDA INST OF TECH	S L LEHOCZKY	MSFC	J D PATTERSON	NAG 8-941	3318
13	FLORIDA INST OF TECH	S D COBB	MSFC	J D PATTERSON	NAG 8-1094	3319
13	UNIV OF FLORIDA	A L FRIPP	LARC	T J ANDERSON	NAG 1-609	3397
13	UNIV OF FLORIDA	H S BLOOMFIELD	LERC	N J DIAZ	NAS 3-26314	3436
13	UNIV OF MIAMI	W I SCALLION	LARC	Y C THIO	NAG 1-1199	3454
13	UNIV OF SO FLORIDA	A J ZUCKERWAR	LARC	R S CHANG	NAS 1-19508	3492
13	UNIV OF SO FLORIDA	E PRIOR	LARC	D K KILLINGER	NGT 00-050-979	3497
13	CLARK ATLANTA UNIV	A F HEPP	LERC	C R HANDY	NCC 3-286	3509
13	GEORGIA INST OF TECH	D A HOLLAND	HQ	H S VALK	NAGW 3817	3567
13	UNIV OF HAWAII-MANOA	B PALASZEWSKI	LERC	J R GAINES	NAG 3-1083	3654
13	UNIV OF HAWAII-MANOA	R V STACHNIK	HQ	D N HALL	NAGW 755	3685
13	UNIV OF HAWAII-MANOA	J D BOHLIN	HQ	A N MCCLYMONT	NAGW 864	3687
13	UNIV OF HAWAII-MANOA	J D BOHLIN	HQ	R C CANFIELD	NAGW 1454	3692
13	UNIV OF HAWAII-MANOA	J D BOHLIN	HQ	R C CANFIELD	NAGW 1542	3693
13	UNIV OF HAWAII-MANOA	W N WAGNER	HQ	D L MICKEY	NAGW 1699	3694
13	UNIV OF HAWAII-MANOA	W J WAGNER	HQ	B LABONTE	NAGW 4116	3737
13	NORTHWESTERN UNIV	R A WILKINSON	LERC	A Z PATASHINSKI	NAG 3-1617	3787
13	NORTHWESTERN UNIV	J ALEXANDER	HQ	J B KETTERSON	NGT 00-050-907	3823
13	NORTHWESTERN UNIV	D HOLLAND	HQ	J B KETTERSON	NGT 00-051-301	3826
13	SO ILL UNIV-CARBONDL	W E MEADOR	LARC	F B MALIK	NAG 1-1563	3830
13	UNIV OF CHICAGO	L E LASHER	ARC	J A SIMPSON	NAG 2-380	3836
13	UNIV OF CHICAGO	T J BIRMINGHAM	GSFC	R ROSNER	NAG 5-1485	3843
13	UNIV OF CHICAGO	J R FISCHER	GSFC	R ROSNER	NAG 5-2218	3849
13	UNIV OF CHICAGO	I D BROWNE	JSC	J V SMITH	NAG 9-47	3858

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	UNIV OF CHICAGO	G C CLAYTON	HQ	D Q LAMB	NAGW 1284	3863
13	UNIV OF CHICAGO	G C CLAYTON	HQ	L M HOBBS	NAGW 1475	3865
13	UNIV OF CHICAGO	J D BOHLIN	HQ	R ROSNER	NAGW 1685	3869
13	UNIV OF CHICAGO	W V JONES	HQ	P MEYER	NAGW 1982	3872
13	UNIV OF CHICAGO	W V JONES	HQ	D MULLER	NAGW 1995	3873
13	UNIV OF CHICAGO	J D BOHLIN	HQ	E N PARKER	NAGW 2122	3874
13	UNIV OF CHICAGO	W V JONES	HQ	J A SIMPSON	NAGW 2368	3876
13	UNIV OF CHICAGO	H C BRINTON	HQ	R N CLAYTON	NAGW 3345	3890
13	UNIV OF CHICAGO	W V JONES	HQ	J A SIMPSON	NAGW 3797	3895
13	UNIV OF CHICAGO	W V JONES	HQ	S SWORDY	NAGW 3894	3896
13	UNIV OF CHICAGO	J M DAVIS	MSFC	R ROSNER	NCC 8-7	3901
13	UNIV OF CHICAGO	F C OWENS	HQ	D Q LAMB	NGT 00-050-617	3905
13	UNIV OF CHICAGO	F C OWENS	HQ	S SWORDY	NGT 00-050-797	3907
13	UNIV OF CHICAGO	J K ALEXANDER	HQ	D N SCHRAMM	NGT 00-050-993	3909
13	UNIV OF CHICAGO	J ALEXANDER	HQ	M TURNER	NGT 00-050-997	3910
13	UNIV OF CHICAGO	D HOLLAND	HQ	D MULLER	NGT 00-051-066	3912
13	UNIV OF CHICAGO	D HOLLAND	HQ	J A SIMPSON	NGT 00-051-300	3915
13	UNIV OF CHICAGO	D HOLLAND	HQ	D N SCHRAMM	NGT 00-051-318	3917
13	UNIV OF CHICAGO	P SMITH	HQ	D Q LAMB	NGT 00-051-322	3918
13	UNIV ILLINOIS-URBANA	R STACHNIK	HQ	S CASERTANO	NAGW 2945	3982
13	DE PAUW UNIVERSITY	D R MC INTOSH	MSFC	H L BROOKS	NAG 8-983	4011
13	INDIANA U-BLOOMINGTN	N GEHRELS	GSFC	D FRIESEL	NAG 5-1394	4021
13	INDIANA U-BLOOMINGTN	M M MELLOTT	HQ	R M HEINZ	NAGW 1035	4024
13	PURDUE UNIVERSITY	G SOFFEN	GSFC	T J MOFFETT	NGT 00-050-937	4106
13	ROSE-HULMAN INST TEC	A D PLINE	LERC	H P STAHL	NAG 3-1300	4116
13	ST MARYS COLLEGE	M V ZELLER	LERC	J J BELLINA	NCC 3-200	4118
13	IOWA STATE UNIV	G C CLAYTON	HQ	L A WILLSON	NAGW 1364	4168
13	UNIV OF IOWA	T J BIRMINGHAM	GSFC	I H CAIRNS	NAG 5-1483	4194
13	UNIV OF IOWA	M H ACUNA	GSFC	J D SCUDDER	NAG 5-2231	4199
13	UNIV OF IOWA	M ACONA	GSFC	R R ANDERSON	NAG 5-2346	4200
13	UNIV OF IOWA	M H ACUNA	GSFC	L A FRANK	NAG 5-2371	4201
13	UNIV OF IOWA	L J EARLY	GSFC	W CALVERT	NAG 5-5023	4207
13	UNIV OF IOWA	L JOHNSON	MSFC	W CALVERT	NAG 8-1030	4209
13	UNIV OF IOWA	G K PARKS	HQ	W S KURTH	NAGW 1539	4210
13	UNIV OF IOWA	M M MELLOTT	HQ	S R SPANGLER	NAGW 1594	4211
13	UNIV OF IOWA	G K PARKS	HQ	L A FRANK	NAGW 1631	4212
13	UNIV OF IOWA	M M MELLOTT	HQ	J G LYON	NAGW 1653	4213
13	UNIV OF IOWA	M M MELLOTT	HQ	M D'ANGELO	NAGW 1791	4214
13	UNIV OF IOWA	M M MELLOTT	HQ	I H CAIRNS	NAGW 2040	4215
13	UNIV OF IOWA	M M MELLOTT	HQ	J G LYON	NAGW 2626	4217
13	UNIV OF IOWA	E C WHIPPLE	HQ	C HUANG	NAGW 2847	4218
13	UNIV OF IOWA	W V JONES	HQ	I CAIRNS	NAGW 3461	4221
13	UNIV OF IOWA	E C WHIPPLE	HQ	A M PERSOON	NAGW 3576	4222
13	UNIV OF IOWA	F WAINSCOTT	GSFC	D A GURNETT	NAS 5-26857	4223
13	UNIV OF IOWA	J GALLOWAY	GSFC	L FRANK	NAS 5-30316	4225
13	UNIV OF IOWA	D CROSBY	GSFC	D A GURNETT	NAS 5-30371	4226
13	UNIV OF IOWA	G A LESANE	HQ	J A GOREE	NGT 00-051-351	4236
13	UNIV OF KANSAS	M M MELLOTT	HQ	T E CRAVENS	NAGW 1559	4254
13	UNIV OF KANSAS	R STACHNIK	HQ	A L MELOTT	NAGW 2923	4256
13	UNIV OF KANSAS	F C OWENS	HQ	T E CRAVENS	NGT 00-050-784	4274
13	LA ST U&A&M COL-BRGE	M M MELLOTT	HQ	J P WEFEL	NAGW 1027	4317
13	LA ST U&A&M COL-BRGE	M M MELLOTT	HQ	T G GUZIK	NAGW 1526	4318
13	LA ST U&A&M COL-BRGE	T W PERRY	HQ	T G GUZIK	NAGW 2607	4324
13	LA ST U&A&M COL-BRGE	J D BOHLIN	HQ	M L CHERRY	NAGW 3289	4325
13	LA ST U&A&M COL-BRGE	J D BOHLIN	HQ	M L CHERRY	NAGW 3560	4326
13	LA ST U&A&M COL-BRGE	G SOFFEN	GSFC	R C SVOBODA	NGT 00-050-927	4335
13	UNIV OF NEW ORLEANS	B T UPCHURCH	LARC	J W IUOP	NAG 1-1625	4371
13	JOHNS HOPKINS UNIV	L J EARLY	GSFC	P D FELDMAN	NAG 5-619	4402
13	JOHNS HOPKINS UNIV	S A CURTIS	GSFC	R A GREENWALD	NAG 5-1099	4403
13	JOHNS HOPKINS UNIV	G D BULLOCK	GSFC	A T LUI	NAG 5-1673	4413

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	JOHNS HOPKINS UNIV	G BULLOCK	GSFC	D SIBECK	NAG 5-1674	4414
13	JOHNS HOPKINS UNIV	L J EARLY	GSFC	J H YEE	NAG 5-5016	4443
13	JOHNS HOPKINS UNIV	M M MELLOTT	HQ	T A PSTEMRA	NAGW 1650	4446
13	JOHNS HOPKINS UNIV	M M MELLOTT	HQ	K B BAKER	NAGW 2059	4449
13	JOHNS HOPKINS UNIV	M M MELLOTT	HQ	D G MITCHELL	NAGW 2583	4456
13	JOHNS HOPKINS UNIV	M M MELLOTT	HQ	R B DECKER	NAGW 2619	4457
13	JOHNS HOPKINS UNIV	W V JONES	HQ	B H MAUK	NAGW 2691	4458
13	JOHNS HOPKINS UNIV	M M MELLOTT	HQ	P J NEWELL	NAGW 2854	4460
13	JOHNS HOPKINS UNIV	D L REASONER	HQ	B J ANDERSON	NAGW 3052	4465
13	JOHNS HOPKINS UNIV	E C WHIPPLE	HQ	K TAKAHASHI	NAGW 3058	4467
13	JOHNS HOPKINS UNIV	E C WHIPPLE	HQ	A Y LUI	NAGW 3449	4477
13	JOHNS HOPKINS UNIV	E C WHIPPLE	HQ	D G SIBECK	NAGW 3523	4478
13	JOHNS HOPKINS UNIV	E C WHIPPLE	HQ	V ANGELOPOULOS	NAGW 4020	4483
13	JOHNS HOPKINS UNIV	E C WHIPPLE	HQ	M KANE	NAGW 4043	4486
13	JOHNS HOPKINS UNIV	M MELLOTT	HQ	R E ERLANDSON	NAGW 4055	4487
13	JOHNS HOPKINS UNIV	E C WHIPPLE	HQ	B J ANDERSON	NAGW 4133	4488
13	JOHNS HOPKINS UNIV	E C WHIPPLE	HQ	E C ROELOF	NAGW 4140	4489
13	JOHNS HOPKINS UNIV	W SULLIVAN	GSFC	F W OLIVER	NAG 5-2375	4502
13	MORGAN STATE UNIV	B W GUENTHER	GSFC	A D GRAINGER	NAG 5-2686	4504
13	UNIV MARYLAND-COL PK	R A WILKINSON	LERC	R A FERRELL	NAG 3-1180	4542
13	UNIV MARYLAND-COL PK	R A WILKINSON	LERC	R A FERRELL	NAG 3-1395	4544
13	UNIV MARYLAND-COL PK	S CURTIS	GSFC	S GLOECKNER	NAG 5-716	4550
13	UNIV MARYLAND-COL PK	S A CURTIS	GSFC	K PAPADOPOULOS	NAG 5-1101	4555
13	UNIV MARYLAND-COL PK	K W OGILVIE	GSFC	M A COPLAN	NAG 5-1129	4556
13	UNIV MARYLAND-COL PK	D S SPICER	GSFC	J M FINN	NAG 5-1356	4561
13	UNIV MARYLAND-COL PK	J E ALLEN	GSFC	C C DAVIS	NAG 5-1427	4562
13	UNIV MARYLAND-COL PK	Y FLOM	GSFC	M TURCHINSKAYA	NAG 5-1890	4574
13	UNIV MARYLAND-COL PK	J C BRASUNAS	GSFC	T VENKATESAN	NAG 5-1979	4578
13	UNIV MARYLAND-COL PK	N GEHRELS	GSFC	J WEBER	NAG 5-2571	4607
13	UNIV MARYLAND-COL PK	J D BOHLIN	HQ	J M FINN	NAGW 1346	4619
13	UNIV MARYLAND-COL PK	J D BOHLIN	HQ	M R KUNDU	NAGW 1541	4621
13	UNIV MARYLAND-COL PK	M M MELLOTT	HQ	T E EASTMAN	NAGW 1848	4624
13	UNIV MARYLAND-COL PK	W V JONES	HQ	G M MASON	NAGW 1990	4628
13	UNIV MARYLAND-COL PK	W V JONES	HQ	J A EARL	NAGW 2062	4629
13	UNIV MARYLAND-COL PK	M M MELLOTT	HQ	J F DRAKE	NAGW 2079	4630
13	UNIV MARYLAND-COL PK	M M MELLOTT	HQ	W BENESCH	NAGW 2168	4631
13	UNIV MARYLAND-COL PK	J D BOHLIN	HQ	M R KUNDU	NAGW 2172	4632
13	UNIV MARYLAND-COL PK	W V JONES	HQ	F B MCDONALD	NAGW 2504	4636
13	UNIV MARYLAND-COL PK	W J WAGNER	HQ	N GOPALSWAMY	NAGW 2760	4642
13	UNIV MARYLAND-COL PK	W J WAGNER	HQ	M R KUNDU	NAGW 3080	4649
13	UNIV MARYLAND-COL PK	E C WHIPPLE	HQ	R LOPEZ	NAGW 3222	4653
13	UNIV MARYLAND-COL PK	W V JONES	HQ	E SEO	NAGW 3526	4658
13	UNIV MARYLAND-COL PK	E C WHIPPLE	HQ	A SHARMA	NAGW 3596	4660
13	UNIV MARYLAND-COL PK	R W LAUVER	LERC	R W GAMMON	NAS 3-25370	4674
13	UNIV MARYLAND-COL PK	W R NAGEL	GSFC	G M MASON	NAS 5-30704	4677
13	UNIV MARYLAND-COL PK	A K HARDING	GSFC	J TRASCO	NCC 5-54	4692
13	UNIV MARYLAND-COL PK	R GUALDONI	HQ	K R KOLOS	NCCW 39	4699
13	UNIV MARYLAND-COL PK	F C OWENS	HQ	D C HAMILTON	NGT 00-050-658	4708
13	UNIV MARYLAND-COL PK	F C OWENS	HQ	R RAMATY	NGT 00-050-721	4710
13	UNIV MARYLAND-COL PK	G SOFFEN	GSFC	R RAMATY	NGT 00-050-763	4712
13	UNIV MARYLAND-COL PK	J K ALEXANDER	HQ	A GALVIN	NGT 00-050-957	4717
13	UNIV MARYLAND-COL PK	P BROCKMAN	LARC	B DIBARTOLO	NAG 1-955	4734
13	BOSTON COLLEGE	J K ALEXANDER	HQ	R L CORNVILLANN	NGT 00-050-996	4735
13	BOSTON COLLEGE	L J EARLY	GSFC	M MENDILLO	NAG 5-640	4738
13	BOSTON UNIVERSITY	R H PLESS	GSFC	S CHAKRABARTI	NAG 5-690	4739
13	BOSTON UNIVERSITY	L J EARLY	GSFC	S CHAKRABARTI	NAG 5-694	4740
13	BOSTON UNIVERSITY	L J EARLY	GSFC	S CHAKRABARTI	NAG 5-695	4741
13	BOSTON UNIVERSITY	M ACUNA	GSFC	T FRITZ	NAG 5-2115	4746
13	BOSTON UNIVERSITY	M L GOLDSTEIN	GSFC	T A FRITZ	NAG 5-2266	4748
13	BOSTON UNIVERSITY	M H ACUNA	GSFC	T A FRITZ	NAG 5-2578	4750

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	BOSTON UNIVERSITY	M M MELLOTT	HQ	W J HUGHES	NAGW 1627	4753
13	BOSTON UNIVERSITY	M M MELLOTT	HQ	M MENDILLO	NAGW 1629	4754
13	BOSTON UNIVERSITY	W V JONES	HQ	S P AHLEN	NAGW 2138	4755
13	BOSTON UNIVERSITY	M M MELLOTT	HQ	G M ERICKSON	NAGW 2627	4756
13	BOSTON UNIVERSITY	M M MELLOTT	HQ	M MENDILLO	NAGW 2679	4757
13	BOSTON UNIVERSITY	E C WHIPPLE	HQ	G M ERICKSON	NAGW 2856	4758
13	BOSTON UNIVERSITY	E C WHIPPLE	HQ	H E SPENCE	NAGW 3953	4762
13	BOSTON UNIVERSITY	M M MELLOTT	HQ	M MENDILLO	NAGW 3998	4763
13	BOSTON UNIVERSITY	E C WHIPPLE	HQ	T A FRITZ	NAGW 4085	4765
13	HARVARD UNIVERSITY	J D BOHLIN	HQ	W H PARKINSON	NAGW 1687	4807
13	HARVARD UNIVERSITY	W J WAGNER	HQ	W H PARKINSON	NAGW 2570	4810
13	HARVARD UNIVERSITY	B M CARPENTER	HQ	F A SPAEPEN	NAGW 2838	4812
13	HARVARD UNIVERSITY	M C LEE	HQ	F SPAEPEN	NAGW 3509	4819
13	HARVARD UNIVERSITY	F C OWENS	HQ	I I SHAPIRO	NGT 00-050-699	4842
13	HARVARD UNIVERSITY	J K ALEXANDER	HQ	J E GRINDLAY	NGT 00-050-999	4850
13	HARVARD UNIVERSITY	D HOLLAND	HQ	R P KIRSHNER	NGT 00-051-093	4853
13	MASS INST OF TECH	R V HESS	LARC	H P JENSSEN	NAG 1-924	4859
13	MASS INST OF TECH	C R MCCREIGHT	ARC	Q HU	NAG 2-693	4878
13	MASS INST OF TECH	R F BENSON	GSFC	M C LEE	NAG 5-1055	4914
13	MASS INST OF TECH	T J BIRMINGHAM	GSFC	T CHANG	NAG 5-2255	4939
13	MASS INST OF TECH	R C DARTY	MSFC	M FLEMINGS	NAG 8-971	4962
13	MASS INST OF TECH	R C DARTY	MSFC	H E WITT	NAG 8-980	4963
13	MASS INST OF TECH	M M MELLOTT	HQ	T S CHANG	NAGW 1532	4983
13	MASS INST OF TECH	M M MELLOTT	HQ	A J LAZARUS	NAGW 1550	4985
13	MASS INST OF TECH	G ASRAR	HQ	J A KONG	NAGW 1617	4986
13	MASS INST OF TECH	M M MELLOTT	HQ	A BERS	NAGW 2048	4995
13	MASS INST OF TECH	W J WAGNER	HQ	P KUMAR	NAGW 3511	5025
13	MASS INST OF TECH	W J WAGONER	HQ	P KUMAR	NAGW 3936	5032
13	MASS INST OF TECH	W V JONES	HQ	A J LAZARUS	NAGW 3941	5033
13	MASS INST OF TECH	F R CHANG-DIAZ	JSC	T F YANG	NAS 9-18372	5050
13	MASS INST OF TECH	D GILMAN	HQ	G RICKER	NASW 4690	5053
13	MASS INST OF TECH	F C OWENS	HQ	S MEYER	NGT 00-050-720	5073
13	MASS INST OF TECH	J ALEXANDER	HQ	S MEYER	NGT 00-050-908	5076
13	MASS INST OF TECH	F SIX	MSFC	W H LEWIN	NGT 00-051-369	5084
13	TUFTS UNIVERSITY	W J WAGNER	HQ	K LANG	NAGW 2383	5098
13	UNIV OF MASS-LOWELL	J B POLLACK	ARC	R R GAMACHE	NCC 2-5029	5103
13	UNIV OF MASS-AMHERST	M BICAY	HQ	N ERICKSON	NAGW 2430	5120
13	HOPE COLLEGE	F SIX	MSFC	P L GONTHIER	NAG 8-263	5162
13	MICHIGAN STATE UNIV	J D BOHLIN	HQ	R F STEIN	NAGW 1695	5172
13	MICHIGAN TECH UNIV	H L NGUYEN	LERC	S L YANG	NAG 3-1109	5180
13	MICHIGAN TECH UNIV	A W MUELLER	LARC	J C ROGERS	NCC 1-145	5187
13	UNIV MICH-ANN ARBOR	G L MADDREA	LARC	V J ABREU	NAG 1-1331	5201
13	UNIV MICH-ANN ARBOR	L J EARLY	GSFC	J T CLARKE	NAG 5-653	5227
13	UNIV MICH-ANN ARBOR	T J BIRMINGHAM	GSFC	T I GOMBOSI	NAG 5-1500	5229
13	UNIV MICH-ANN ARBOR	D FAIRFIELD	GSFC	C R CLAUER	NAG 5-2228	5239
13	UNIV MICH-ANN ARBOR	L J EARLY	GSFC	W E SHARP	NAG 5-5003	5250
13	UNIV MICH-ANN ARBOR	M MELLOTT	HQ	T L KILLEEN	NAGW 1535	5263
13	UNIV MICH-ANN ARBOR	M M MELLOTT	HQ	A F NAGY	NAGW 1619	5264
13	UNIV MICH-ANN ARBOR	M M MELLOTT	HQ	G TARLE	NAGW 1642	5265
13	UNIV MICH-ANN ARBOR	M M MELLOTT	HQ	E G FONTHEIM	NAGW 2008	5273
13	UNIV MICH-ANN ARBOR	M M MELLOTT	HQ	P M BANKS	NAGW 2350	5279
13	UNIV MICH-ANN ARBOR	M M MELLOTT	HQ	T L KILLEEN	NAGW 3457	5290
13	UNIV MICH-ANN ARBOR	E C WHIPPLE	HQ	J U KOZYRA	NAGW 4021	5296
13	UNIV MICH-ANN ARBOR	D HIGGINS	MSFC	P BANKS	NAS 8-38772	5311
13	UNIV MICH-ANN ARBOR	J FERRANTE	LERC	D J SROLOVITZ	NCC 3-214	5321
13	UNIV MICH-ANN ARBOR	L J EARLY	GSFC	W E SHARP	NGR23-5360	5323
13	UNIV MICH-ANN ARBOR	B SWINFORD	MSFC	J U KOZYRA	NGT 00-051-180	5342
13	UNIV MICH-ANN ARBOR	D HOLLAND	HQ	T I GOMBOSI	NGT 00-051-323	5346
13	U MINN-MNPLS-ST PAUL	J DUDENHOEFER	LERC	T W SIMON	NAG 3-598	5375
13	U MINN-MNPLS-ST PAUL	W V JONES	HQ	C J WADDINGTON	NAGW 2004	5395

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	U MINN-MNPLS-ST PAUL	W V JONES	HQ	T W JONES	NAGW 2548	5398
13	U MINN-MNPLS-ST PAUL	M M MELLOTT	HQ	R L LYSAK	NAGW 2690	5400
13	U MINN-MNPLS-ST PAUL	W V JONES	HQ	C J WADDINGTON	NAGW 3014	5401
13	U MINN-MNPLS-ST PAUL	C RAY	HQ	J W HALEY	NAGW 3324	5404
13	U MINN-MNPLS-ST PAUL	H C BRINTON	HQ	R O PEPIN	NAGW 3336	5405
13	U MINN-MNPLS-ST PAUL	S BENNER	GSFC	K MAUERSBERGER	NAS 5-32454	5409
13	U MINN-MNPLS-ST PAUL	F C OWENS	HQ	P J KELLOGG	NGT 00-050-684	5424
13	U MINN-MNPLS-ST PAUL	B CARPENTER	HQ	J W HALLEY	NGT 00-051-090	5427
13	U MINN-MNPLS-ST PAUL	G A LESANE	HQ	J W HALLEY	NGT 00-051-359	5431
13	UNIV MISS-UNIVERSITY	W L WILLSHIRE	LARC	H E BASS	NAG 1-1076	5466
13	UNIV MISS-UNIVERSITY	W L WILLSHIRE	LARC	H E BASS	NAG 1-1460	5467
13	UNIV MO-ROLLA	B M CARPENTER	HQ	D E DAY	NAGW 2846	5503
13	WASHINGTON UNIVERSTY	E C ETHRIDGE	MSFC	K F KELTON	NAG 8-873	5512
13	WASHINGTON UNIVERSTY	M ZOLENSKY	JSC	E ZINNER	NAG 9-684	5519
13	WASHINGTON UNIVERSTY	R STACHNIK	HQ	J I KATZ	NAGW 2918	5530
13	WASHINGTON UNIVERSTY	W V JONES	HQ	J KLARMANN	NAGW 3013	5532
13	WASHINGTON UNIVERSTY	F C OWENS	HQ	W B MCKINNON	NGT 00-050-629	5550
13	WASHINGTON UNIVERSTY	F C OWENS	HQ	J KLARMANN	NGT 00-050-789	5551
13	WASHINGTON UNIVERSTY	D A HOLLAND	HQ	K F KELTON	NGT 00-051-061	5552
13	WASHINGTON UNIVERSTY	D HOLLAND	HQ	R M WALKER	NGT 00-051-298	5553
13	WASHINGTON UNIVERSTY	D HOLLAND	HQ	J KLARMANN	NGT 00-051-319	5554
13	WASHINGTON UNIVERSTY	P H JOHNSTON	LARC	J G MILLER	NSG-1601	5555
13	EASTERN MONTANA UNIV	F SIX	MSFC	A F BENTLEY	NAG 8-262	5556
13	UNIV NEBRASKA-LINCLN	F A CUCINOTTA	LARC	R KATZ	NAG 1-1447	5579
13	UNIV NEBRASKA-LINCLN	J D WARNER	LERC	J A WOOLAM	NAG 3-866	5582
13	UNIV NEBRASKA-LINCLN	L C LARRY	LERC	J P BARTON	NAG 3-1261	5583
13	DARTMOUTH COLLEGE	L J EARLY	GSFC	J W LABELLE	NAG 5-663	5621
13	DARTMOUTH COLLEGE	S A CURTIS	GSFC	M K HUDSON	NAG 5-1098	5622
13	DARTMOUTH COLLEGE	T J BIRMINGHAM	GSFC	W LOTKO	NAG 5-2252	5626
13	DARTMOUTH COLLEGE	M M MELLOTT	HQ	D C MONTGOMERY	NAGW 710	5629
13	DARTMOUTH COLLEGE	M M MELLOTT	HQ	M K HUDSON	NAGW 1652	5630
13	DARTMOUTH COLLEGE	M M MELLOTT	HQ	W LOTKO	NAGW 1824	5631
13	DARTMOUTH COLLEGE	D L REASONER	HQ	C FESEN	NAGW 3045	5634
13	DARTMOUTH COLLEGE	E C WHIPPLE	HQ	J G LYON	NAGW 3972	5637
13	DARTMOUTH COLLEGE	M M MELLOTT	HQ	W LOTKO	NAGW 3989	5638
13	DARTMOUTH COLLEGE	E C WHIPPLE	HQ	B SONNERUP	NAGW 4023	5640
13	DARTMOUTH COLLEGE	J K ALEXANDER	HQ	J LABELLE	NGT 00-050-936	5645
13	UNIV NEW HAMP-DURHAM	J T GALOFARO	LERC	R B TORBERT	NAG 3-1181	5648
13	UNIV NEW HAMP-DURHAM	J M HICKMAN	LERC	R B TORBERT	NAG 3-1599	5649
13	UNIV NEW HAMP-DURHAM	L J EARLY	GSFC	R B TORBERT	NAG 5-656	5650
13	UNIV NEW HAMP-DURHAM	L J EARLY	GSFC	R L ARNOLDY	NAG 5-678	5651
13	UNIV NEW HAMP-DURHAM	L J EARLY	WFF	R ARNOLDY	NAG 5-692	5652
13	UNIV NEW HAMP-DURHAM	T J BIRMINGHAM	GSFC	J V HOLLWEG	NAG 5-1479	5654
13	UNIV NEW HAMP-DURHAM	L J EARLY	GSFC	R ARNOLDY	NAG 5-5007	5665
13	UNIV NEW HAMP-DURHAM	L J EARLY	GSFC	C KLETZING	NAG 5-5010	5666
13	UNIV NEW HAMP-DURHAM	M M MELLOTT	HQ	R L KAUFMAN	NAGW 1625	5671
13	UNIV NEW HAMP-DURHAM	J K ALEXANDER	HQ	R B TORBERT	NAGW 2043	5676
13	UNIV NEW HAMP-DURHAM	M M MELLOTT	HQ	T G ONSAGER	NAGW 2505	5678
13	UNIV NEW HAMP-DURHAM	W V JONES	HQ	P A ISENBERG	NAGW 2579	5679
13	UNIV NEW HAMP-DURHAM	E C WHIPPLE	HQ	C KLETZING	NAGW 2697	5681
13	UNIV NEW HAMP-DURHAM	W J WAGNER	HQ	W T VESTRAND	NAGW 2756	5685
13	UNIV NEW HAMP-DURHAM	W J WAGNER	HQ	D J FORREST	NAGW 2759	5686
13	UNIV NEW HAMP-DURHAM	W V JONES	HQ	J A LOCKWOOD	NAGW 3454	5691
13	UNIV NEW HAMP-DURHAM	W J WAGNER	HQ	T G FORBES	NAGW 3463	5692
13	UNIV NEW HAMP-DURHAM	W J WAGNER	HQ	E L CHUPP	NAGW 3512	5693
13	UNIV NEW HAMP-DURHAM	E C WHIPPLE	HQ	R B TORBERT	NAGW 3676	5695
13	UNIV NEW HAMP-DURHAM	E C WHIPPLE	HQ	E MOBIUS	NAGW 3723	5697
13	UNIV NEW HAMP-DURHAM	M M MELLOTT	HQ	K LYNCH	NAGW 3980	5700
13	UNIV NEW HAMP-DURHAM	L CHRISTENSEN	GSFC	R TORBERT	NAS 5-30744	5702
13	UNIV NEW HAMP-DURHAM	K OGILVIE	GSFC	R TORBERT	NAS 5-33002	5705

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	UNIV NEW HAMP-DURHAM	F C OWENS	HQ	J M RYAN	NGT 00-050-610	5711
13	UNIV NEW HAMP-DURHAM	F C OWENS	HQ	R HARRISS	NGT 00-050-657	5712
13	UNIV NEW HAMP-DURHAM	J ALEXANDER	HQ	R B TORBETT	NGT 00-050-910	5714
13	UNIV NEW HAMP-DURHAM	G SOFFEN	GSFC	J M RYAN	NGT 00-051-170	5716
13	PRINCETON UNIVERSITY	R R ANTCLIFF	LARC	R B MILES	NAG 1-1231	5718
13	PRINCETON UNIVERSITY	L J EARLY	GSFC	E B JENKINS	NAG 5-616	5730
13	PRINCETON UNIVERSITY	G LEVY	HQ	D T WILKINSON	NAGW 1482	5754
13	PRINCETON UNIVERSITY	M M MELLOTT	HQ	H OKUDA	NAGW 2538	5761
13	PRINCETON UNIVERSITY	F C OWENS	HQ	M DRAGOVAN	NGT 00-050-622	5777
13	PRINCETON UNIVERSITY	F C OWENS	HQ	R B MILES	NGT 00-050-826	5778
13	RUTGERS ST U-N BRNSK	H C BRINTON	HQ	R H HEWINS	NAGW 3391	5794
13	NEW MEX INST MINING	L J EARLY	GSFC	P PERSSON	NAG 5-5004	5825
13	NEW MEX ST U-LAS CR	R E STREITMATTER	GSFC	R L GOLDEN	NAG 5-2070	5835
13	NEW MEX ST U-LAS CR	W JONES	HQ	W R WEBBER	NAGW 2016	5846
13	NEW MEX ST U-LAS CR	W V JONES	HQ	W R WEBBER	NAGW 3022	5848
13	UNIV OF NEW MEXICO	D K RUSSELL	HQ	J K MCIVER	NGT 00-070-329	5891
13	CITY U OF NY CTY COL	N P BARNES	LARC	R R ALFANO	NAG 1-1346	5896
13	CITY U OF NY CTY COL	R W VERNON	LERC	J KOPLIK	NAG 3-1167	5898
13	CITY U OF NY CTY COL	B L WHITE	HQ	R ALFANO	NAGW 4098	5905
13	CLARKSON UNIVERSITY	F R SZOFRA	MSFC	W R WILCOX	NAG 8-753	5920
13	CLARKSON UNIVERSITY	G L MARTIN	HQ	L L REGAL	NAGW 3471	5924
13	COLUMBIA UNIVERSITY	L J EARLY	GSFC	R NOVICK	NAG 5-618	5934
13	COLUMBIA UNIVERSITY	L J EARLY	GSFC	C MARTIN	NAG 5-642	5935
13	COLUMBIA UNIVERSITY	L KALUZIENSKI	HQ	P KAARET	NAGW 2721	5977
13	COLUMBIA UNIVERSITY	M MELLOTT	HQ	G A NAVRATIL	NAGW 3010	5978
13	COLUMBIA UNIVERSITY	E C WHIPPLE	HQ	M E MAUEL	NAGW 3539	5983
13	COLUMBIA UNIVERSITY	F C OWENS	HQ	C MARTIN	NGT 00-050-792	6004
13	COLUMBIA UNIVERSITY	C HIX	JPL	P KAARET	NGT 00-051-038	6005
13	CORNELL UNIVERSITY	P F PENKO	LERC	I D BOYD	NAG 3-1451	6029
13	CORNELL UNIVERSITY	L J EARLY	GSFC	P M KINTNER	NAG 5-601	6031
13	CORNELL UNIVERSITY	L J EARLY	GSFC	W E SWARTZ	NAG 5-666	6032
13	CORNELL UNIVERSITY	L J EARLY	GSFC	P KINTNER	NAG 5-681	6033
13	CORNELL UNIVERSITY	L J EARLY	GSFC	P KINTNER	NAG 5-687	6034
13	CORNELL UNIVERSITY	L J EARLY	GSFC	P KINTNER	NAG 5-691	6035
13	CORNELL UNIVERSITY	L J EARLY	GSFC	P KINTNER	NAG 5-5008	6047
13	CORNELL UNIVERSITY	L J EARLY	GSFC	M C KELLEY	NAG 5-5009	6048
13	CORNELL UNIVERSITY	M M MELLOTT	HQ	N F OTANI	NAGW 2011	6060
13	CORNELL UNIVERSITY	D L REASONER	HQ	C E SEYLER	NAGW 2960	6076
13	CORNELL UNIVERSITY	J B POLLACK	ARC	J VEVERKA	NCA 2-731	6094
13	CORNELL UNIVERSITY	F C OWENS	HQ	P M KINTNER	NGT 00-050-664	6100
13	CORNELL UNIVERSITY	F C OWENS	HQ	S W SQUIRES	NGT 00-050-845	6103
13	CORNELL UNIVERSITY	J ALEXANDER	HQ	B ISACKS	NGT 00-050-960	6109
13	NEW YORK UNIVERSITY	R A WILKINSON	LERC	J K PERCUS	NAG 3-1414	6133
13	POLYTECHNIC U	R F BENSON	GSFC	S P KUO	NAG 5-1051	6144
13	RENSSELAER POLY-NY	D O FRAZIER	MSFC	M E GLICKMAN	NCC 8-54	6177
13	ROCHESTER INST TECH	G L SCHUSTER	LARC	J R ANDREWS	NAG 1-1147	6194
13	ST JOHN FISHER COLL	F SIX	MSFC	W LEWIS	NAG 8-1002	6199
13	STATE UNIV NY-ALBANY	T Y MILLER	MSFC	W E GIBSON	NAS 8-39926	6215
13	STATE UNIV NY-ALBANY	A F HEPP	LERC	A E KOLOYEROS	NCC 3-284	6218
13	STATE UNIV NY-ALBANY	F MONTAGANI	LERC	A E KOLOYEROS	NGT 00-051-239	6219
13	STATE U NY-BINGHAMTN	J C HARDIN	LARC	J F GEER	NAG 1-1099	6220
13	STATE UNIV NY-BUFFAL	S M WANDER	HQ	W GEORGE	NAGW 966	6239
13	STATE U NY-STONY BRK	D C GILLIES	MSFC	M DUDLEY	NCC 8-48	6285
13	STATE U NY-STONY BRK	D C GILLIES	MSFC	M DUDLEY	NCC 8-53	6286
13	ST U NY COL-BUFFALO	F C OWENS	HQ	D J MOOK	NGT 00-070-142	6294
13	SYRACUSE UNIVERSITY	L CAROFF	HQ	G VIDALI	NAGW 2932	6304
13	UNIV OF ROCHESTER	J D BOHLIN	HQ	J H THOMAS	NAGW 2123	6311
13	UNIV OF ROCHESTER	H ASHKENAS	JPL	D M WATSON	NGT 00-050-888	6320
13	DUKE UNIVERSITY	S H CASTLES	GSFC	H MEYER	NAG 5-379	6329
13	DUKE UNIVERSITY	E E MONTGOMERY	MSFC	J M MADEY	NAG 8-982	6331

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	FAYETTEVILLE STATE U	F SIX	MSFC	J WU	NAG 8-996	6352
13	NO CAROLINA STATE U	F C JONES	GSFC	D C ELLISON	NAG 5-1042	6387
13	NO CAROLINA STATE U	T J BIRMINGHAM	GSFC	D C ELLISON	NAG 5-2254	6390
13	NO CAROLINA STATE U	N WHITE	GSFC	J BLENDIN	NAG 5-2580	6391
13	NO CAROLINA STATE U	W V JONES	HQ	D C ELLISON	NAGW 2001	6396
13	NO CAROLINA STATE U	F MONTEGANI	LERC	G LUCOUSKY	NGT 00-070-236	6425
13	BALDWIN-WALLACE COL	R W VERNON	LERC	D G PROCTOR	NCC 3-157	6464
13	BALDWIN-WALLACE COL	J M FLOWERS	LERC	D G PROCTOR	NCC 3-315	6467
13	CASE WESTERN RESERVE	D C FERGUSON	LERC	I GREBER	NAG 3-795	6471
13	CASE WESTERN RESERVE	A CHAIT	LERC	P L TAYLOR	NAG 3-1201	6485
13	CASE WESTERN RESERVE	I L KRAINSKY	LERC	B SEGALL	NAG 3-1525	6499
13	CASE WESTERN RESERVE	B BANKS	LERC	B SEGEL	NAS 3-26054	6508
13	CASE WESTERN RESERVE	E HAUGLAND	LERC	B SEGALL	NCC 3-25	6511
13	CASE WESTERN RESERVE	I WEINBERG	LERC	R W HOFFMAN	NCC 3-118	6519
13	CASE WESTERN RESERVE	D C FERGUSON	LERC	T G ECK	NCC 3-141	6523
13	CASE WESTERN RESERVE	I L KRAINSKY	LERC	W L GORDON	NCC 3-258	6534
13	CASE WESTERN RESERVE	F MONTEGANI	LERC	K D SINGER	NGT 00-050-947	6560
13	CASE WESTERN RESERVE	E PRIOR	LARC	T G ECK	NGT 00-070-237	6569
13	CLEVELAND STATE UNIV	S K RUTLEDGE	LERC	P D HAMBOURGER	NAG 3-1531	6591
13	CLEVELAND STATE UNIV		LERC	S N TEWARI	NCC 3-191	6611
13	CLEVELAND STATE UNIV	R C ANDERSON	LERC	J A LOCK	NCC 3-204	6613
13	CLEVELAND STATE UNIV	S RUTLEDGE	LERC	P HAMBOURGER	NCC 3-339	6631
13	COLLEGE OF WOOSTER	R A WILKINSON	LERC	D T JACOBS	NAG 3-1404	6634
13	JOHN CARROLL UNIV	G ADAMOVSKY	LERC	E J CAROME	NAG 3-984	6644
13	KENT STATE UNIV-KENT	I WEINBERG	LERC	C V ABURTO	NAG 3-946	6645
13	KENT STATE UNIV-KENT	J LARIMER	ARC	J KELLY	NCC 2-803	6646
13	KENT STATE UNIV-KENT	R F LEONARD	LERC	D L JOHNSON	NCC 3-222	6648
13	OHIO STATE UNIV	M A MANTENIEKS	LERC	T M YORK	NAG 3-843	6664
13	OHIO STATE UNIV	M P WERNET	LERC	M SAMIMY	NAG 3-1502	6681
13	OHIO STATE UNIV	R S SKARDA	LERC	C D ANDERECK	NAG 3-1612	6684
13	OHIO STATE UNIV	M J KURYLO	HQ	F C DE LUCIA	NAGW 2639	6701
13	UNIV OF AKRON	G D ROBERTS	LERC	E D VON MEERWALL	NCC 3-164	6768
13	UNIV OF AKRON	J M PEREIRA	LERC	E D VON MEERWALL	NCC 3-335	6779
13	UNIV OF CINCINNATI	G BEHEIM	LERC	J T BOYD	NAG 3-852	6786
13	UNIV OF CINCINNATI	M NALL	HQ	J M ALBAYYARI	NCCW 35	6815
13	WITTENBERG UNIV	G E SCHWARZE	LERC	A J FRASCA	NAG 3-795	6882
13	OKLAHOMA STATE UNIV	D F CHAO	LERC	P TONET	NAG 3-1613	6886
13	OKLAHOMA STATE UNIV	G A ZIMMERLI	LERC	B J ACKERSON	NAG 3-1624	6887
13	UNIV OREGON-EUGENE	M C LEE	HQ	R J DONNELLY	NAGW 3354	6971
13	CARNEGIE-MELLON UNIV	M M WEISLOGEL	LERC	S GAROFF	NCC 3-262	6997
13	PENN STATE U-UNIV PK	L J EARLY	GSFC	C L CROSKY	NAG 5-683	7088
13	PENN STATE U-UNIV PK	L J EARLY	GSFC	J D RUSSELL	NAG 5-5015	7116
13	PENN STATE U-UNIV PK	M P VOLZ	MSFC	G S DUBKAVICH	NCC 8-56	7173
13	PENN STATE U-UNIV PK	D HOLLAND	HQ	D BURROWS	NGT 00-051-125	7191
13	UNIV OF PITTSBURGH	J A POWELL	LERC	W J CHOYKE	NAG 3-603	7217
13	UNIV OF PITTSBURGH	L J EARLY	GSFC	E C ZIPF	NAG 5-609	7223
13	UNIV OF PITTSBURGH	L J EARLY	GSFC	E C ZIPF	NAG 5-661	7224
13	UNIV OF PITTSBURGH	G A LESANE	HQ	W L WE	NGT 00-051-348	7243
13	UNIV OF PITTSBURGH	R A WILKINSON	LERC	W L JOHNSON	NCC 3-276	7258
13	WESTMINSTER COLLEGE	M C LEE	HQ	H J MARIS	NAGW 3359	7281
13	BROWN UNIVERSITY	W J WAGNER	HQ	P H SCHULTY	NAGW 3431	7284
13	BROWN UNIVERSITY	G SOFFEN	GSFC	R H BRANDENBERGER	NGT 00-051-011	7301
13	BROWN UNIVERSITY	M BURRELL	GSFC	P T TIMBIE	NGT 00-051-187	7304
13	BROWN UNIVERSITY	G LESANE	HQ	G SEIDEL	NGT 00-051-262	7305
13	BROWN UNIVERSITY	D LONGEDDY	HQ	I D ALEXANDER	NAGW 4099	7329
13	UNIV OF RHODE ISLAND	L J EARLY	GSFC	M F LARSEN	NAG 5-632	7340
13	CLEMSON UNIV-CLEMSON	L J EARLY	GSFC	M F LARSON	NAG 5-5002	7343
13	CLEMSON UNIV-CLEMSON	W J WAGNER	HQ	J R LETAW	NAGW 2769	7346
13	CLEMSON UNIV-CLEMSON	J F STONE	MSFC	L M DUNCAN	NAS 8-37851	7351
13	CLEMSON UNIV-CLEMSON	S R BULLOCK	LERC	W E COLLINS	NAG 3-1430	7395
13	FISK UNIVERSITY					

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	FISS UNIVERSITY	S E MASSENBERG	HQ	E SILBERMAN	NAGW 2925	7398
13	UNIV TENNESSEE-KNOXV	G SOFFEN	GSFC	W E BLASS	NGT 00-050-969	7451
13	VANDERBILT UNIVERSITY	M VLASSE	MSFC	H HOFMEISTER	NAG 8-832	7464
13	VANDERBILT UNIVERSITY	B M CARPENTER	HQ	T G WANG	NAGW 2473	7470
13	VANDERBILT UNIVERSITY	B M CARPENTER	HQ	R N GRUGEL	NAGW 2844	7471
13	VANDERBILT UNIVERSITY	F M SULZMAN	HQ	F A GAFFNEY	NAGW 3764	7473
13	PRAIRIE VIEW A&M U	J P THORNBORROW	JSC	R D BOYD	NAG 9-631	7515
13	PRAIRIE VIEW A&M U	M DIOGU	JSC	T SEN HUANG	NCC 9-31	7519
13	RICE UNIVERSITY	M H ACUNA	GSFC	P A CLOUTIER	NAG 5-1195	7524
13	RICE UNIVERSITY	T J BIRMINGHAM	GSFC	T W HILL	NAG 5-1489	7525
13	RICE UNIVERSITY	M L GOLDSTEIN	GSFC	P H REIFF	NAG 5-2215	7530
13	RICE UNIVERSITY	M M MELLOTT	HQ	P H REIFF	NAGW 1655	7546
13	RICE UNIVERSITY	E C WHIPPLE	HQ	R A WOLF	NAGW 2683	7548
13	RICE UNIVERSITY	E C WHIPPLE	HQ	R A WOLFE	NAGW 2824	7549
13	RICE UNIVERSITY	E C WHIPPLE	HQ	R A WOLF	NAGW 2826	7550
13	RICE UNIVERSITY	B M CARPENTER	HQ	R H HAUGE	NAGW 2845	7551
13	RICE UNIVERSITY	M M MELLOTT	HQ	K SMITH	NAGW 4004	7558
13	RICE UNIVERSITY	E C WHIPPLE	HQ	R A WOLF	NAGW 4035	7559
13	RICE UNIVERSITY	G SOFFEN	GSFC	E P LIANG	NGT 00-050-924	7571
13	RICE UNIVERSITY	G SOFFEN	GSFC	G H VOIGT	NGT 00-051-019	7572
13	RICE UNIVERSITY	D HOLLAND	HQ	R C HAYMES	NGT 00-051-079	7574
13	RICE UNIVERSITY	M BURRELL	GSFC	P A CLOUTIER	NGT 00-051-186	7575
13	TEXAS A&M UNIVERSITY	F C OWENS	HQ	J POSTON	NGT 00-050-380	7666
13	TEXAS TECH UNIV	F C OWENS	HQ	L L HATFIELD	NGT 00-050-635	7711
13	UNIV HOUSTON	L J EARLY	GSFC	E A BERING	NAG 5-688	7715
13	UNIV HOUSTON	G D ARNDT	JSC	R WEINSTEIN	NAG 9-592	7728
13	UNIV HOUSTON	K KRISHEN	JSC	P C CHU	NAG 9-741	7737
13	UNIV HOUSTON	G D ARNDT	JSC	R WEINSTEIN	NAG 9-743	7739
13	UNIV HOUSTON	D K RUSSELL	HQ	T GOLDING	NGT 00-070-250	7753
13	UNIV OF NORTH TEXAS	J J SINGH	LARC	J M PEREZ	NAG 1-1468	7806
13	UNIV TEXAS-AUSTIN	M M MELLOTT	HQ	W HORTON	NAGW 2590	7876
13	UNIV TEXAS-AUSTIN	R E MURPHY	HQ	C K SHUM	NAGW 2941	7880
13	UNIV TEXAS-AUSTIN	F C OWENS	HQ	J C WHEELER	NGT 00-050-853	7920
13	UNIV TEXAS-DALLAS	B CARPENTER	HQ	H L SWINNEY	NGT 00-051-151	7926
13	UNIV TEXAS-DALLAS	M M MELLOTT	HQ	R R HODGES	NAGW 2432	7942
13	UNIV TEXAS-DALLAS	M M MELLOTT	HQ	M R HAIRSTON	NAGW 3466	7947
13	UNIV TEXAS-DALLAS	M M MELLOTT	HQ	W B HANSON	NAGW 4002	7948
13	UNIV TEXAS-EL PASO	A POTTER	JSC	J A LOPEZ	NAG 9-755	7962
13	BRIGHAM YOUNG UNIV	W WAGNER	HQ	J W MOODY	NAGW 2612	7988
13	UNIV OF UTAH	W V JONES	HQ	M H SALAMON	NAGW 1999	8005
13	UTAH STATE UNIV	L J EARLY	GSFC	B G FEJER	NAG 5-672	8015
13	UTAH STATE UNIV	L J EARLY	GSFC	J C ULWICK	NAG 5-686	8016
13	UTAH STATE UNIV	T J BIRMINGHAM	GSFC	R W SCHUNK	NAG 5-1484	8017
13	UTAH STATE UNIV	L J EARLY	GSFC	P J ESPY	NAG 5-5022	8020
13	UTAH STATE UNIV	W V JONES	HQ	D D LIND	NAGW 2066	8022
13	UTAH STATE UNIV	M M MELLOTT	HQ	B G FEJER	NAGW 2103	8023
13	UTAH STATE UNIV	D L REASONER	HQ	C SWENSON	NAGW 2852	8024
13	UTAH STATE UNIV	E C WHIPPLE	HQ	H G DEMARS	NAGW 3567	8027
13	UTAH STATE UNIV	W M KNOTT	KSC	F B SALISBURY	NAG10-73	8031
13	MIDDLEBURY COLLEGE	J D BOHLIN	HQ	R WOLFSON	NAGW 2141	8045
13	NORWICH UNIVERSITY	F SIX	MSFC	W TIMOSZYK	NAG 8-238	8046
13	U VERMONT & ST AGR C	F SIX	MSFC	Y YU	NAG 8-1006	8048
13	CHRISTPHR NEWPORT U	P BROCKMAN	LARC	A M BUONCRISTIANI	NAG 1-796	8051
13	CHRISTPHR NEWPORT U	J L SHINN	LARC	C K CHANG	NAG 1-1286	8053
13	CHRISTPHR NEWPORT U	J L SHINN	LARC	C K CHANG	NCC 1-178	8057
13	COLLEGE OF WM & MARY	P H JOHNSTON	LARC	B T SMITH	NAG 1-1063	8065
13	COLLEGE OF WM & MARY	R S ROGOWSKI	LARC	D M MANOS	NAG 1-1575	8069
13	COLLEGE OF WM & MARY	P H JOHNSTON	LARC	D M MANOS	NAG 1-1585	8070
13	COLLEGE OF WM & MARY	K E CRAMER	LARC	D M MANOS	NAG 1-1597	8071
13	COLLEGE OF WM & MARY	M A SMITH	LARC	D C BENNER	NCC 1-80	8076

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
13	GEORGE MASON UNIV	J R FISCHER	GSFC	R LOHNER	NAG 5-2652	8102
13	GEORGE MASON UNIV	J P NORRIS	GSFC	M KAFATOS	NCC 5-52	8105
13	HAMPTON UNIVERSITY	E J CONWAY	LARC	D D VENABLE	NAG 1-1091	8110
13	HAMPTON UNIVERSITY	J J SINGH	LARC	K S HAN	NAG 1-1168	8111
13	HAMPTON UNIVERSITY	S E MASSENBERG	HQ	D D VENABLE	NAGW 2929	8116
13	NORFOLK STATE UNIV	J C BARNES	LARC	G E MILLER	NAG 1-845	8122
13	NORFOLK STATE UNIV	J H LEE	LARC	G E MILLER	NAG 1-1513	8125
13	OLD DOMINION UNIV	G C GREENE	LARC	O A KANDIL	NAG 1-994	8139
13	OLD DOMINION UNIV	S H CHOI	LARC	J H HEINBOCKEL	NAG 1-1424	8150
13	OLD DOMINION UNIV	G C GREENE	LARC	R L ASH	NAG 1-1437	8153
13	OLD DOMINION UNIV	E V BROWELL	LARC	H ELSAYED-ALI	NAG 1-1578	8163
13	OLD DOMINION UNIV	R A KIMBLE	GSFC	J BECHER	NAG 5-1527	8168
13	OLD DOMINION UNIV	L W TOWNSEND	LARC	G S KHANDLWAL	NCC 1-42	8174
13	OLD DOMINION UNIV	E J PRIOR	LARC	G S KHANDLWAL	NGT 00-051-104	8188
13	OLD DOMINION UNIV	E J PRIOR	LARC	W L HARNES	NGT 00-070-263	8195
13	OLD DOMINION UNIV	M M MELLOTT	HQ	R E JOHNSON	NAGW 2046	8246
13	UNIV OF VIRGINIA	M BICAY	HQ	A W LICHTENBERGER	NAGW 2377	8251
13	UNIV OF VIRGINIA	E C WHIPPLE	HQ	R R BARAGIOLA	NAGW 3954	8254
13	UNIV OF VIRGINIA	F C OWENS	HQ	J J DORING	NGT 00-050-568	8271
13	UNIV OF VIRGINIA	F C OWENS	HQ	J J DORNING	NGT 00-050-821	8281
13	UNIV OF VIRGINIA	G LESANE	HQ	J J DORNING	NGT 00-051-063	8289
13	VIRGINIA STATE UNIV	J W WILSON	LARC	C E STRONACH	NAG 1-1527	8414
13	UNIV OF WASHINGTON	H C NEEDLEMAN	GSFC	R H HOLZWORTH	NAG 5-668	8437
13	UNIV OF WASHINGTON	L J EARLY	GSFC	G K PARKS	NAG 5-677	8438
13	UNIV OF WASHINGTON	H C NEEDLEMAN	GSFC	R H HOLZWORTH	NAG 5-685	8439
13	UNIV OF WASHINGTON	L J EARLY	GSFC	R H HOLZWORTH	NAG 5-5011	8453
13	UNIV OF WASHINGTON	G ASRAR	HQ	L TSANG	NAGW 1702	8469
13	UNIV OF WASHINGTON	M M MELLOTT	HQ	G K PARKS	NAGW 2009	8472
13	UNIV OF WASHINGTON	W V JONES	HQ	R J WILKES	NAGW 2156	8473
13	UNIV OF WASHINGTON	W V JONES	HQ	R WILKES	NAGW 3528	8498
13	UNIV OF WASHINGTON	E C WHIPPLE	HQ	G K PARKS	NAGW 3650	8502
13	UNIV OF WASHINGTON	M M MELLOTT	HQ	R H HOLZWORTH	NAGW 4147	8509
13	UNIV OF WASHINGTON	J J O'BRIEN	GSFC	G K PARKS	NAS 5-26850	8513
13	UNIV OF WASHINGTON	K STICH	GSFC	G K PARKS	NAS 5-30613	8514
13	UNIV OF WASHINGTON	F C OWENS	HQ	J LORD	NGT 00-050-700	8549
13	UNIV OF WASHINGTON	F C OWENS	HQ	G K PARKS	NGT 00-050-788	8551
13	UNIV OF WASHINGTON	D HOLLAND	HQ	R M WINGLEE	NGT 00-051-155	8557
13	WASHINGTON ST UNIV	R J SKARDA	LERC	P L MARSTON	NAG 3-1622	8567
13	WASHINGTON ST UNIV	W KNOTT	KSC	B W POOVAIAH	NAG10-61	8573
13	UNIV WISC-LA CROSSE	F A CUCINOTTA	LARC	J W NORBURY	NAG 1-1457	8618
13	UNIV WISC-MADISON	J A SALZMAN	LERC	S KOU	NAG 3-1393	8631
13	UNIV WISC-MADISON	R KELLEY	GSFC	D MCCAMMON	NAG 5-594	8634
13	UNIV WISC-MADISON	L J EARLY	GSFC	K H NORDSIECK	NAG 5-647	8635
13	UNIV WISC-MADISON	L J EARLY	GSFC	R J REYNOLDS	NAG 5-674	8636
13	UNIV WISC-MADISON	L J EARLY	GSFC	D MCCAMMON	NAG 5-679	8637
13	UNIV WISC-MADISON	D MCKAY	JSC	G L KULCINSKI	NAG 9-568	8677
13	UNIV WISC-MADISON	B M CARPENTER	HQ	R F COOPER	NAGW 2835	8695
13	UNIV WISC-MADISON	B M CARPENTER	HQ	J H PEREPEZKO	NAGW 2841	8696
13	UNIV WISC-MADISON	D C GILLIES	MSFC	R J MATYI	NCC 8-52	8743
13	UNIV WISC-MILWAUKEE	T K GLASGOW	LERC	M LEVY	NAG 3-1274	8759
13	UNIV OF WYOMING	M J KAVAYA	MSFC	R INGUVA	NAG 8-249	8773
13	U PUERTO RICO-MAYAGZ	R A KESKI-KUHA	GSFC	F E FERNANDEZ	NAG 5-2188	8787
13	U PUERTO RICO-MAYAGZ	M V LASSE	MSFC	A BARRIENTAS	NAG 8-1085	8789
13	U PUERTO RICO-MAYAGZ	D K RUSSELL	HQ	A LEYDERMAN	NGT 00-070-322	8805
13	U P'ERTO RICO-HUMACAO	F SIX	MSFC	C HERNANDEZ	NAG 8-1003	8809
19	ALABAMA A&M UNIV	G H FICHTL	MSFC	C W LOWE	NAG 8-236	1010
19	AUBURN UNIV-AUBURN	C CRANNELL	GSFC	L GREENE	NAS 5-30759	1032
19	UNIV ALA-BIRMINGHAM	H C BRINTON	HQ	D C AGRESTI	NAGW 3081	1068
19	UNIV ALA-BIRMINGHAM	F R SZOFRAN	MSFC	R N ANDREWS	NAS 8-38672	1073
19	UNIV ALA-BIRMINGHAM	L C YATES	MSFC	J B ANDREWS	NAS 8-39717	1074

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
19	UNIV ALA-BIRMINGHAM	K HIGGINBETHAM	MSFC	L J DELUCAS	NAS 8-39762	1075
19	UNIV ALA-BIRMINGHAM	H K HIGGINBOTHAM	MSFC	L J DELUCAS	NAS 8-40189	1078
19	UNIV ALA-HUNTSVILLE	A L FRIPP	LARC	A NADARAJAH	NAG 1-1534	1084
19	UNIV ALA-HUNTSVILLE	J A SALZMAN	LERC	J I ALEXANDER	NAG 3-1384	1086
19	UNIV ALA-HUNTSVILLE	F R SZOFRAN	MSFC	F E ROSENBERGER	NAG 8-842	1109
19	UNIV ALA-HUNTSVILLE	M L PUSEY	MSFC	F ROSENBERGER	NAG 8-931	1113
19	UNIV ALA-HUNTSVILLE	M L PUSEY	MSFC	A NADARAJAH	NAG 8-984	1117
19	UNIV ALA-HUNTSVILLE	L B JETER	MSFC	F ROSENBERGER	NAS 8-39716	1159
19	UNIV ALA-TUSCALOOSA	P A CURRERI	MSFC	W F KAUHLER	NAS 8-40185	1160
19	UNIV ALA-TUSCALOOSA	I C YATES	MSFC	D M STEFANESCU	NAS 8-39715	1211
19	UNIV OF SO ALABAMA	P A CURRERI	MSFC	D M STEFANESCU	NCC 8-34	1213
19	UNIV ALASKA-FAIRBNKS	F SIX	MSFC	R E SPALL	NAG 8-278	1220
19	UNIV ALASKA-FAIRBNKS	D K HALL	GSFC	C S BENSON	NAG 5-887	1225
19	UNIV ALASKA-FAIRBNKS	G D BULLOCK	GSFC	D WEIMER	NAG 5-2249	1230
19	UNIV ALASKA-FAIRBNKS	L J EARLY	GSFC	E M WESCOTT	NAG 6-1	1235
19	ARIZONA STATE UNIV	R J GUNDERMAN	LERC	C E MAYER	NAS 3-26401	1255
19	ARIZONA STATE UNIV	J A NUTH	HQ	S WYCOFF	NAGW 2241	1308
19	ARIZONA STATE UNIV	J A NUTH	HQ	J W LARIMER	NAGW 2273	1309
19	ARIZONA STATE UNIV	J A NUTH	HQ	J R HOLLOWAY	NAGW 2274	1310
19	ARIZONA STATE UNIV	J A NUTH	HQ	R L HERVIG	NAGW 2276	1311
19	ARIZONA STATE UNIV	W L QUAIDE	HQ	C SANDERS	NAGW 2343	1313
19	ARIZONA STATE UNIV	J A NUTH	HQ	I M ZIURY	NAGW 3065	1318
19	NORTHERN ARIZONA U	J A NUTH	HQ	C S SHOEMAKER	NAGW 2303	1342
19	UNIV OF ARIZONA	L E LASHER	ARC	D M HUNTEN	NAG 2-143	1354
19	UNIV OF ARIZONA	S S WEGENER	ARC	J A REAGAN	NAG 2-620	1358
19	UNIV OF ARIZONA	J A SALZMAN	LERC	C F CHEN	NAG 3-1386	1366
19	UNIV OF ARIZONA	R S SNYDER	MSFC	J C BAYGENTS	NAG 8-909	1401
19	UNIV OF ARIZONA	I D BROWNE	JSC	J GANGULY	NAG 9-460	1409
19	UNIV OF ARIZONA	M M MELLOTT	HQ	L L HOOD	NAGW 1658	1428
19	UNIV OF ARIZONA	W L QUAIDE	HQ	H P LARSON	NAGW 2206	1438
19	UNIV OF ARIZONA	J A NUTH	HQ	C Y FAN	NAGW 2249	1440
19	UNIV OF ARIZONA	J A NUTH	HQ	J I LUNINE	NAGW 2250	1441
19	UNIV OF ARIZONA	J A NUTH	HQ	D R HUFFMAN	NAGW 2253	1442
19	UNIV OF ARIZONA	J A NUTH	HQ	D MCCARTHY	NAGW 2254	1443
19	UNIV OF ARIZONA	J A NUTH	HQ	J H BLACK	NAGW 2255	1444
19	UNIV OF ARIZONA	J A NUTH	HQ	E LEVY	NAGW 2291	1445
19	UNIV OF ARIZONA	J A NUTH	HQ	L L HOOD	NAGW 2315	1447
19	UNIV OF ARIZONA	J A NUTH	HQ	R S MCMILLAN	NAGW 2321	1448
19	UNIV OF ARIZONA	W L QUAIDE	HQ	C C PORCO	NAGW 2342	1449
19	UNIV OF ARIZONA	W L QUAIDE	HQ	R V YELLE	NAGW 2360	1452
19	UNIV OF ARIZONA	W L QUAIDE	HQ	B R SANDELL	NAGW 2441	1454
19	UNIV OF ARIZONA	W L QUAIDE	HQ	R V YELLE	NAGW 2537	1457
19	UNIV OF ARIZONA	J A NUTH III	HQ	M J DRAKE	NAGW 2884	1469
19	UNIV OF ARIZONA	H C BRINTON	HQ	W V BOYNTON	NAGW 3076	1471
19	UNIV OF ARIZONA	H C BRINTON	HQ	J LEWIS	NAGW 3400	1482
19	UNIV OF ARIZONA	J A NUTH	HQ	W BENZ	NAGW 3406	1483
19	UNIV OF ARIZONA	J T BERGSTRALH	HQ	R V YELLE	NAGW 3631	1494
19	UNIV OF ARIZONA	H C BRINTON	HQ	W V BOYNTON	NAGW 3717	1500
19	ARKANSAS STATE UNIV	F SIX	MSFC	B BENNETT	NAG 8-277	1570
19	UNIV ARKANSAS-LTL RK	F SIX	MSFC	T VISWANATHAN	NAG 8-276	1578
19	CALIF INST OF TECH	J A NUTH	HQ	T A TOMBRELLO	NAGW 2279	1642
19	CALIF INST OF TECH	J A NUTH	HQ	G A BLAKE	NAGW 2297	1643
19	CALIF INST OF TECH	J A NUTH	HQ	E STOLPER	NAGW 2320	1644
19	CALIF INST OF TECH	W L QUAIDE	HQ	Y L YUNG	NAGW 2362	1645
19	CALIF INST OF TECH	W L QUAIDE	HQ	A P INGERSOLL	NAGW 2363	1646
19	CALIF INST OF TECH	W L QUAIDE	HQ	D O MUHLEMAN	NAGW 2396	1649
19	CALIF INST OF TECH	W QUAIDE	HQ	E C STONE	NAGW 2402	1650
19	CALIF INST OF TECH	W L QUAIDE	HQ	T J AHRENS	NAGW 2439	1651
19	CALIF INST OF TECH	W QUAIDE	HQ	B MURRAY	NAGW 2491	1652
19	CALIF INST OF TECH	W L QUAIDE	HQ	D J STEVENSON	NAGW 2496	1653

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
19	CALIF INST OF TECH	W QUAIDE	HQ	D O MUHLEMAN	NAGW 2576	1654
19	CALIF INST OF TECH	J A NUTH	HQ	G J WASSERBURG	NAGW 3040	1664
19	CALIF INST OF TECH	J A NUTH	HQ	A I SARGENT	NAGW 3172	1666
19	CALIF INST OF TECH	J A NUTH	HQ	S R KULKARNI	NAGW 3207	1667
19	CALIF INST OF TECH	J LAUDADIO	GSFC	E STONE	NAS 5-32626	1691
19	CALIF INST OF TECH	F C OWENS	HQ	Y L YUNG	NGT 00-050-726	1696
19	CAL STATE U-FULLERTN	J A NUTH	HQ	D S WOLLUM	NAGW 2515	1750
19	SAN FRAN STATE UNIV	D LEISER	ARC	G FISHER	NCC 2-5053	1803
19	SAN JOSE STATE UNIV	L E LASHER	ARC	B RAGENT	NCC 2-466	1838
19	SAN JOSE STATE UNIV	J W DYER	ARC	L COLIN	NCC 2-527	1840
19	STANFORD UNIVERSITY	B S SINGH	LERC	G M HOMSY	NAG 3-1475	1900
19	STANFORD UNIVERSITY	G D BULLOCK	GSFC	R A HELLIWELL	NAG 5-476	1902
19	STANFORD UNIVERSITY	G D BULLOCK	GSFC	U S INAN	NAG 5-1549	1904
19	STANFORD UNIVERSITY	I D BROWNE	JSC	R N ZARE	NAG 9-458	1912
19	STANFORD UNIVERSITY	W L QUAIDE	HQ	L TYLER	NAGW 2437	1926
19	STANFORD UNIVERSITY	W L QUAIDE	HQ	V R ESHLEMAN	NAGW 2442	1927
19	STANFORD UNIVERSITY	W L QUAIDE	HQ	U S INAN	NAGW 2894	1932
19	STANFORD UNIVERSITY	H C BRINTON	HQ	G L TYLER	NAGW 3375	1936
19	UNIV CALIF-BERKELEY	G D BULLOCK	GSFC	J CHAKRABARTI	NAG 5-1507	2066
19	UNIV CALIF-BERKELEY	G D BULLOCK	GSFC	C A CATTELL	NAG 5-1523	2067
19	UNIV CALIF-BERKELEY	L J EARLY	GSFC	C W CARLSON	NAG 6-10	2107
19	UNIV CALIF-BERKELEY	J A NUTH	HQ	S W STAHLER	NAGW 3107	2138
19	UNIV CALIF-BERKELEY	J A NUTH III	HQ	F H SHU	NAGW 3595	2146
19	UNIV CALIF-IRVINE	J A NUTH	HQ	S P RUDEN	NAGW 2260	2322
19	UNIV CALIF-IRVINE	L E MAULDRIN	LARC	R CICERONE	NAS 1-19155	2330
19	UNIV CALIF-L ANGELES	J M HICKMAN	LERC	C T RUSSELL	NAG 3-1584	2362
19	UNIV CALIF-L ANGELES	J M HICKMAN	LERC	C T RUSSELL	NAG 3-1646	2363
19	UNIV CALIF-L ANGELES	G D BULLOCK	GSFC	J E MAGGS	NAG 5-488	2364
19	UNIV CALIF-L ANGELES	G D BULLOCK	GSFC	M G KIVELSON	NAG 5-1529	2376
19	UNIV CALIF-L ANGELES	G D BULLOCK	GSFC	R J WALKER	NAG 5-1530	2377
19	UNIV CALIF-L ANGELES	G D BULLOCK	GSFC	C RUSSELL	NAG 5-1967	2381
19	UNIV CALIF-L ANGELES	I D BROWNE	JSC	P H WARREN	NAG 9-87	2391
19	UNIV CALIF-L ANGELES	J A NUTH	HQ	J T WASSON	NAGW 2243	2412
19	UNIV CALIF-L ANGELES	J A NUTH	HQ	W M KAULA	NAGW 2269	2413
19	UNIV CALIF-L ANGELES	J A NUTH	HQ	B M ZUCKERMAN	NAGW 2270	2414
19	UNIV CALIF-L ANGELES	W QUAIDE	HQ	P M DAVIS	NAGW 2384	2416
19	UNIV CALIF-L ANGELES	W L QUAIDE	HQ	D D BARBOSA	NAGW 2397	2417
19	UNIV CALIF-L ANGELES	W L QUAIDE	HQ	G L SISCOE	NAGW 2409	2418
19	UNIV CALIF-L ANGELES	W L QUAIDE	HQ	C T RUSSELL	NAGW 2573	2420
19	UNIV CALIF-L ANGELES	W L QUAIDE	HQ	J LUHMANN	NAGW 2575	2421
19	UNIV CALIF-L ANGELES	W L QUAIDE	HQ	C T RUSSELL	NAGW 2886	2427
19	UNIV CALIF-L ANGELES	J A NUTH	HQ	J F KERRIDGE	NAGW 3064	2430
19	UNIV CALIF-L ANGELES	J A NUTH	HQ	NEWMAN	NAGW 3132	2433
19	UNIV CALIF-L ANGELES	H C BRINTON	HQ	P M DAVIS	NAGW 3468	2439
19	UNIV CALIF-L ANGELES	H C BRINTON	HQ	R THORNE	NAGW 3590	2447
19	UNIV CALIF-L ANGELES	A DOUGHERTY	HQ	V K DHIR	NASW 4891	2468
19	UNIV CALIF-SAN DIEGO	L E LASHER	ARC	W FILLIUS	NAG 2-153	2500
19	UNIV CALIF-SAN DIEGO	I D BROWNE	JSC	K MARTI	NAG 9-41	2533
19	UNIV CALIF-SAN DIEGO	D E PITTS	JSC	S K RIDE	NAG 9-706	2538
19	UNIV CALIF-SAN DIEGO	J A NUTH	HQ	M H THIEMENS	NAGW 2251	2553
19	UNIV CALIF-SAN DIEGO	J A NUTH	HQ	A MENDIS	NAGW 2252	2554
19	UNIV CALIF-SAN DIEGO	W L QUAIDE	HQ	J R ARNOLD	NAGW 2577	2556
19	UNIV CALIF-SAN DIEGO	J A NUTH	HQ	B JONES	NAGW 3127	2572
19	UNIV CALIF-S BARBARA	G I JOHNSTON	HQ	L A COLDREN	NAGW 2027	2639
19	UNIV CALIF-S CRUZ	J A NUTH	HQ	P H BODENHEIMER	NAGW 3408	2682
19	UNIV CALIF-S CRUZ	J A NUTH III	HQ	D LIN	NAGW 3599	2683
19	UNIV SAN FRANCISCO	T A PARNELL	MSFC	E V BENTON	NAG 8-789	2706
19	UNIV OF SOUTHERN CAL	S M WANDER	HQ	R E KAPLAN	NAGW 1061	2726
19	UNIV OF SOUTHERN CAL	W L QUAIDE	HQ	D L JUDGE	NAGW 2354	2729
19	UNIV OF SOUTHERN CAL	H C BRINTON	HQ	D E SHEMANSKY	NAGW 3002	2734

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
19	UNIV COLORADO-BOLDR	M E HILL	LERC	J N KOSTER	NAG 3-1094	2833
19	UNIV COLORADO-BOLDR	J A SALZMAN	LERC	R L SANI	NAG 3-1410	2839
19	UNIV COLORADO-BOLDR	G D BULLOCK	GSFC	T N WOODS	NAG 5-1505	2854
19	UNIV COLORADO-BOLDR	G D BULLOCK	GSFC	D W RUSCH	NAG 5-1525	2855
19	UNIV COLORADO-BOLDR	M BALTUCK	HQ	J WAHR	NAGW 1942	2950
19	UNIV COLORADO-BOLDR	M BALTUCK	HQ	G ROSBOROUGH	NAGW 1944	2951
19	UNIV COLORADO-BOLDR	J A NUTH	HQ	G R STEWART	NAGW 2248	2958
19	UNIV COLORADO-BOLDR	W L QUAIDE	HQ	J E COLWELL	NAGW 2404	2962
19	UNIV COLORADO-BOLDR	W L QUAIDE	HQ	W R PRYOR	NAGW 2488	2965
19	UNIV COLORADO-BOLDR	W L QUAIDE	HQ	B JAKOSKY	NAGW 2879	2978
19	UNIV COLORADO-BOLDR	J T BERGSTRAHL	HQ	M HORANYI	NAGW 3271	2999
19	UNIV COLORADO-BOLDR	H C BRINTON	HQ	W A MCCLINTOCK	NAGW 3370	3002
19	UNIV COLORADO-BOLDR	M C BRINTON	HQ	D H GRINSPOON	NAGW 3584	3008
19	UNIV COLORADO-BOLDR	J A NUTH III	HQ	T P SNOW	NAGW 3600	3010
19	UNIV COLORADO-BOLDR	G HALL	MSFC	J E HART	NAS 8-31958	3035
19	UNIV COLORADO-BOLDR	F C OWNES	HQ	A F GOETZ	NGT 00-050-728	3075
19	UNIV COLORADO-BOLDR	L J EARLY	GSFC	C A BARTH	NSG-5103	3114
19	WESLEYAN UNIVERSITY	J A NUTH	HQ	W HERBST	NAGW 3632	3150
19	YALE UNIVERSITY	C A STEARNS	LARC	D ROSNER	NAG 3-884	3151
19	GEORGE WASHINGTON U	J B STEPHENS	MSFC	J M LOGSDON	NAG 8-788	3218
19	GEORGE WASHINGTON U	G ASRAR	HQ	R H LANG	NAGW 2071	3219
19	CATHOLIC UNIVERSITY	D K RUSSELL	HQ	F C BRUHWEILER	NGT 00-070-371	3270
19	FLORIDA ATLANTIC U	R J GUNDERMAN	LERC	H F HELMKEN	NAS 3-26956	3315
19	UNIV OF FLORIDA	A L FRIPP	LARC	T J ANDERSON	NAG 1-1474	3400
19	UNIV OF FLORIDA	F HORZ	JSC	S F DERMOTT	NAG 9-440	3417
19	UNIV OF FLORIDA	W L QUAIDE	HQ	T D CARR	NAGW 2410	3420
19	UNIV OF FLORIDA	A B DOUGHERTY	HQ	J F KLAUSNER	NASW 4888	3438
19	UNIV OF SO FLORIDA	G J GUNDERMAN	LERC	R E HENNING	NAS 3-26412	3493
19	CLARK ATLANTA UNIV	S STECURA	LERC	T MENSAH	NAG 3-1394	3506
19	GEORGIA INST OF TECH	J A NUTH	HQ	J W BELETIC	NAGW 3181	3564
19	UNIV OF HAWAII-MANOA	I D BROWNE	JSC	K KEIL	NAG 9-454	3680
19	UNIV OF HAWAII-MANOA	J A NUTH	HQ	A TOKUNAGA	NAGW 2278	3701
19	UNIV OF HAWAII-MANOA	J A NUTH	HQ	D JEWITT	NAGW 3398	3716
19	NORTHWESTERN UNIV	D F CHAO	LERC	J B GROTERBERG	NAG 3-1636	3788
19	UNIV OF CHICAGO	G BULLOCK	GSFC	P MEYER	NAG 5-2307	3851
19	UNIV OF CHICAGO	I D BROWNE	JSC	F J OLSEN	NAG 9-498	3861
19	UNIV OF CHICAGO	J A NUTH	HQ	I M STEELE	NAGW 2272	3875
19	UNIV OF CHICAGO	W L QUAIDE	HQ	T ECONOMOU	NAGW 2578	3878
19	UNIV OF CHICAGO	J A NUTH	HQ	R CLAYTON	NAGW 3069	3883
19	UNIV OF CHICAGO	J A NUTH	HQ	L GROSSMAN	NAGW 3212	3886
19	UNIV OF CHICAGO	F C OWENS	HQ	R C SRIVASTAVA	NGT 00-050-449	3903
19	UNIV OF CHICAGO	J T LYNCH	HQ	S MEYER	NGT 00-051-100	3913
19	UNIV ILLINOIS-URBANA	A L FRIPP	LARC	J A DANTZIG	NAG 1-1545	3933
19	UNIV ILLINOIS-URBANA	J A NUTH	HQ	L E SNYDER	NAGW 2299	3979
19	INDIANA U-BLOOMINGTN	J A NUTH	HQ	R DURISON	NAGW 3399	4027
19	PURDUE UNIVERSITY	I D BROWNE	JSC	M E LIPSCHUTZ	NAG 9-580	4075
19	UNIV OF NOTRE DAME	J A NUTH	HQ	S C TEGLER	NAGW 3433	4130
19	IOWA STATE UNIV	B F SMITH	ARC	J D IVERSON	NAG 2-151	4147
19	IOWA STATE UNIV	E L PORCE	ARC	R C SEAGRAVE	NAG 2-885	4150
19	IOWA STATE UNIV	S D COBB	MSFC	T A LOGRASSO	NAG 8-963	4167
19	IOWA STATE UNIV	J BERGSTRAHL	HQ	M SEGAL	NAGW 4060	4171
19	UNIV OF IOWA	J M HICKMAN	LERC	W S KURTH	NAG 3-1580	4188
19	UNIV OF IOWA	G D BULLOCK	GSFC	D A GURNETT	NAG 5-310	4191
19	UNIV OF IOWA	G D BULLOCK	GSFC	L A FRANK	NAG 5-483	4192
19	UNIV OF IOWA	G BULLOCK	GSFC	L A FRANK	NAG 5-1109	4193
19	UNIV OF IOWA	G D BULLOCK	GSFC	C HUANG	NAG 5-1543	4195
19	UNIV OF IOWA	R F BENSON	GSFC	W CALVERT	NAG 5-1926	4196
19	UNIV OF IOWA	G D BULLOCK	GSFC	J D MENIETTI	NAG 5-2102	4198
19	UNIV OF IOWA	J A NUTH	HQ	J A GOREE	NAGW 3126	4219
19	UNIV OF IOWA	H C BRINTON	HQ	J D MENIETTI	NAGW 3143	4220

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
19	UNIV OF KANSAS	H C BRINTON	HQ	M SEGAL	NAGW 3420	4259
19	LA ST U&A&M COL-BRGE	W I SCALLION	LARC	R W COURTER	NAG 1-1359	4310
19	NWN ST U-LOUISIANA	C R CHAPPELL	MSFC	H W HYDE	NAG 8-150	4346
19	JOHNS HOPKINS UNIV	W P WINFREE	LARC	J W WAGNER	NAG 1-1191	4397
19	JOHNS HOPKINS UNIV	W P WINFREE	LARC	J WAGNER	NAG 1-1524	4398
19	JOHNS HOPKINS UNIV	G D BULLOCK	GSFC	D G MITCHELL	NAG 5-1524	4406
19	JOHNS HOPKINS UNIV	G D BULLOCK	GSFC	R E ERLANDSON	NAG 5-1601	4409
19	JOHNS HOPKINS UNIV	J A NUTH	HQ	D A NEUFELD	NAGW 2307	4451
19	JOHNS HOPKINS UNIV	W L QUAIDE	HQ	A F CHENG	NAGW 2373	4452
19	JOHNS HOPKINS UNIV	W L QUAIDE	HQ	B H MAUK	NAGW 2433	4453
19	JOHNS HOPKINS UNIV	W L QUAIDE	HQ	D F STROBEL	NAGW 2443	4454
19	JOHNS HOPKINS UNIV	H C BRINTON	HQ	A F CHENG	NAGW 3387	4475
19	JOHNS HOPKINS UNIV	F WAINSCOTT	GSFC	P D FELDMAN	NAS 5-26848	4490
19	SALISBURY STATE COL	F SIX	MSFC	J L TYROLL	NAG 8-992	4513
19	UNIV MARYLAND-COL PK	G D BULLOCK	GSFC	T EASTMAN	NAG 5-1558	4566
19	UNIV MARYLAND-COL PK	I D BROWNE	JSC	R J WALKER	NAG 9-548	4614
19	UNIV MARYLAND-COL PK	J M BOYCE	HQ	M A'HEARN	NAGW 2889	4645
19	UNIV MARYLAND-COL PK	R E MURPHY	HQ	R DUBAYAH	NAGW 2928	4646
19	UNIV MARYLAND-COL PK	J A NUTH,III	HQ	L MUNDY	NAGW 3066	4648
19	UNIV MARYLAND-COL PK	H C BRINTON	HQ	R KHANNA	NAGW 3598	4661
19	UNIV MARYLAND-COL PK	W R HOEGY	GSFC	S W GREENWOOD	NCC 5-35	4690
19	U OF MD BALTIMOR CTY	J WELKER	GSFC	P M MASOUKA	NCC 5-76	4732
19	BOSTON UNIVERSITY	W L QUAIDE	HQ	W J HUGHES	NAGW 2890	4759
19	CLARK UNIVERSITY	M E HILL	LERC	S P LIN	NAG 3-1402	4774
19	HARVARD UNIVERSITY	J A NUTH	HQ	A G CAMERON	NAGW 2277	4808
19	HARVARD UNIVERSITY	W L QUAIDE	HQ	J BLOXHAM	NAGW 2494	4809
19	HARVARD UNIVERSITY	J A NUTH	HQ	S B JACOBSEN	NAGW 2858	4813
19	HARVARD UNIVERSITY	G MADDREA	LARC	S C WOFSY	NAS 1-18946	4822
19	MASS INST OF TECH	D B SNYDER	LERC	D E HASTINGS	NAG 3-695	4889
19	MASS INST OF TECH	E C ETHRIDGE	MSFC	A F WITT	NAG 8-949	4957
19	MASS INST OF TECH	M B ROBINSON	MSFC	J SZEKELY	NAG 8-1069	4964
19	MASS INST OF TECH	G LEVY	HQ	S S MEYER	NAGW 1841	4989
19	MASS INST OF TECH	M BALTUCK	HQ	M N TOKSOZ	NAGW 1961	4992
19	MASS INST OF TECH	J A NUTH	HQ	J N HEWITT	NAGW 2310	5002
19	MASS INST OF TECH	W L QUAIDE	HQ	H B HAMMEL	NAGW 2385	5004
19	MASS INST OF TECH	W L QUAIDE	HQ	J W BELCHER	NAGW 2403	5006
19	MASS INST OF TECH	B M CARPENTER	HQ	R A BROWN	NAGW 2674	5008
19	MASS INST OF TECH	W L QUAIDE	HQ	T E DOWLING	NAGW 2891	5013
19	MASS INST OF TECH	C RAY	HQ	A F WITT	NAGW 3462	5024
19	MASS INST OF TECH	W L QUAIDE	HQ	P G FRENCH	NAGW 2511	5137
19	WELLESLEY COLLEGE	J T BERGSTRALH	HQ	G STARK	NAGW 3607	5138
19	WELLESLEY COLLEGE	P GILBERT	MSFC	A SACCO	NAS 8-40222	5151
19	WORCESTER POLY INST	F SIX	MSFC	J E DAVIS	NAG 8-999	5156
19	ALMA COLLEGE	A T CHAI	LERC	V S ARPACI	NAG 3-1133	5216
19	UNIV MICH-ANN ARBOR	G D BULLOCK	GSFC	P B HAYS	NAG 5-465	5225
19	UNIV MICH-ANN ARBOR	G D BULLOCK	GSFC	A F NAGY	NAG 5-472	5226
19	UNIV MICH-ANN ARBOR	G D BULLOCK	GSFC	I C MCDADE	NAG 5-1502	5230
19	UNIV MICH-ANN ARBOR	G D BULLOCK	GSFC	J U KOZYRA	NAG 5-1542	5231
19	UNIV MICH-ANN ARBOR	G D BULLOCK	GSFC	G R CARIGNAN	NAG 5-1691	5233
19	UNIV MICH-ANN ARBOR	W R HOEGY	GSFC	T L KILLEEN	NAG 5-2250	5240
19	UNIV MICH-ANN ARBOR	R E HARTLE	GSFC	T L KILLEEN	NAG 5-2250	5240
19	UNIV MICH-ANN ARBOR	W L QUAIDE	HQ	L H BRACE	NAGW 2501	5282
19	UNIV MICH-ANN ARBOR	W L QUAIDE	HQ	S K ATREYA	NAGW 2561	5284
19	UNIV MICH-ANN ARBOR	H C BRINTON	HQ	M COMBI	NAGW 3417	5287
19	UNIV MICH-ANN ARBOR	H C BRINTON	HQ	T M DONAHUE	NAGW 3423	5288
19	UNIV MICH-ANN ARBOR	H C BRINTON	HQ	M COMB	NAGW 3585	5292
19	UNIV MICH-ANN ARBOR	I O CLARK	LARC	J J DERBY	NAG 1-1268	5368
19	U MINN-MNPLS-ST PAUL	G D BULLOCK	GSFC	L J CAHILL	NAG 5-529	5380
19	U MINN-MNPLS-ST PAUL	I D BROWNE	JSC	R O PEPIN	NAG 9-60	5387
19	U MINN-MNPLS-ST PAUL	W L QUAIDE	HQ	K MAUERSBERGER	NAGW 2466	5397
19	U MINN-MNPLS-ST PAUL	F C OWENS	HQ	S BANERJEE	NGT 00-050-421	5422

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
19	MISSISSIPPI STATE U	D CARTER	MSFC	W WILSON	NAG 8-965	5450
19	MISSISSIPPI STATE U	J A SALZMAN	LERC	R A ALTENKIRCH	NCC 3-221	5456
19	PEARL RIVER JR COL	R GALE	SSC	J COLEMAN	NAG13-23	5463
19	UNIV MISS-UNIVERSITY	D K RUSSELL	HQ	M T HARMANN	NGT 00-070-401	5471
19	UNIV SO MISSISSIPPI	J P DOWNEY	MSFC	L J MATHIAS	NAG 8-973	5472
19	UNIV SO MISSISSIPPI	THURMAN	SSC	WHITEHEAD	NAG13-28	5473
19	UNIV MO-ROLLA	R W NIEDZWIECKI	LERC	P WHITFIELD	NCC 3-343	5504
19	WASHINGTON UNIVERSTY	J A NUTH	HQ	F A PODOSEK	NAGW 2304	5523
19	WASHINGTON UNIVERSTY	W L QUAIDE	HQ	W H SMITH	NAGW 2423	5524
19	WASHINGTON UNIVERSTY	W V JONES	HQ	J J BEATTY	NAGW 2990	5531
19	WASHINGTON UNIVERSTY	J A NUTH	HQ	M B FEGLEY	NAGW 3070	5535
19	UNIV NEBRASKA-LINCLN	S H GOLDSTEIN	JSC	R R BISHU	NAG 9-633	5591
19	DARTMOUTH COLLEGE	G D BULLOCK	GSFC	B SONNERUP	NAG 5-1508	5623
19	UNIV NEW HAMP-DURHAM	J D SCUDDER	GSFC	R B TORBERT	NAG 5-1426	5653
19	UNIV NEW HAMP-DURHAM	G D BULLOCK	GSFC	E MOBIUS	NAG 5-1548	5655
19	UNIV NEW HAMP-DURHAM	L J EARLY	GSFC	R L ARNOLDY	NAG 6-12	5667
19	PRINCETON UNIVERSITY	D CARTER	MSFC	M H HECHT	NAG 8-979	5753
19	RUTGERS ST U-PISCTWY	J A NUTH	HQ	R H HEWINS	NAGW 2263	5806
19	NM HIGHLANDS UNIV	F SIX	MSFC	B TAYLOR	NAG 8-196	5820
19	NM HIGHLANDS UNIV	B L WHITE	HQ	R D CLARK	NAGW 4078	5821
19	UNIV OF NEW MEXICO	I D BROWNE	JSC	J J PAPIKE	NAG 9-497	5883
19	UNIV OF NEW MEXICO	J D BOHLIN	HQ	H S AHLUWALIA	NAGW 1468	5884
19	UNIV OF NEW MEXICO	J A NUTH III	HQ	F J RIETMEIJER	NAGW 3646	5888
19	CITY U OF NY CTY COL	M M WEISLOGEL	LERC	C MALDARELLI	NAG 3-1618	5900
19	CLARKSON UNIVERSITY	M E HILL	LERC	R S SUBRAMANIAN	NAG 3-1122	5916
19	CLARKSON UNIVERSITY	F R SZOFRA	MSFC	W R WILCOX	NAG 8-831	5921
19	COLUMBIA UNIVERSITY	I D BROWNE	JSC	J LONGHI	NAG 9-329	5956
19	COLUMBIA UNIVERSITY	G C CLAYTON	HQ	C MARTIN	NAGW 1887	5965
19	CORNELL UNIVERSITY	A T CHAI	LERC	P H STEEN	NAG 3-1401	6028
19	CORNELL UNIVERSITY	J I TROMBKA	GSFC	S W SQUYRES	NAG 5-1307	6037
19	CORNELL UNIVERSITY	G D BULLOCK	GSFC	M G KELLEY	NAG 5-1545	6040
19	CORNELL UNIVERSITY	J A NUTH	HQ	LOVELACE	NAGW 2293	6066
19	CORNELL UNIVERSITY	W L QUAIDE	HQ	S SQUYRES	NAGW 2374	6068
19	CORNELL UNIVERSITY	W L QUAIDE	HQ	P D NICHOLSON	NAGW 2434	6069
19	CORNELL UNIVERSITY	W L QUAIDE	HQ	P J GIERASCH	NAGW 2916	6074
19	CORNELL UNIVERSITY	J T BERGSTRALH	HQ	C SAGAN	NAGW 3273	6077
19	CORNELL UNIVERSITY	H C BRINTON	HQ	S W SQUYRES	NAGW 3283	6080
19	CORNELL UNIVERSITY	L J EARLY	GSFC	M C KELLEY	NSG-6020	6120
19	POLYTECHNIC U	A L FRIPP	LARC	D M SCHLEICH	NAG 1-1387	6141
19	STATE U NY-STONY BRK	J A NUTH	HQ	R F KNACKE	NAGW 2334	6270
19	STATE U NY-STONY BRK	W L QUAIDE	HQ	J L FOX	NAGW 2483	6271
19	STATE U NY-STONY BRK	J A NUTH	HQ	F WALTER	NAGW 3165	6274
19	ST U NY COL-PLATTSBG	I D BROWNE	JSC	G J FLYNN	NAG 9-459	6289
19	SYRACUSE UNIVERSITY	S K ROBINSON	LARC	E F SPINA	NAG 1-1400	6296
19	UNIV OF ROCHESTER	J A NUTH	HQ	H M VAN HORN	NAGW 2262	6312
19	DUKE UNIVERSITY	D CARTER	MSFC	D C RICHARDSON	NAG 8-966	6330
19	NO CAR A&T STATE U	C HERMAN	JSC	J FOSTER	NAG 9-334	6367
19	NO CAROLINA STATE U	S M WANDER	HQ	R DEJARNETTE	NAGW 1072	6394
19	NO CAROLINA STATE U	G MADDREA	LARC	V SAXENA	NAS 1-18944	6402
19	CASE WESTERN RESERVE	R W LAUVER	LERC	D H MATTHIESEN	NAG 3-1478	6497
19	CASE WESTERN RESERVE	A D PLINE	LERC	S OSTRACH	NAG 3-1568	6502
19	CASE WESTERN RESERVE	C A STEARNS	LERC	P PIROUZ	NCC 3-73	6513
19	CASE WESTERN RESERVE	A DOUGHERTY	HQ	R PRIBISICH	NCCW 36	6555
19	CENTRAL ST UNIV-OHIO	J A SALZMAN	LERC	M M GIRGIS	NAG 3-1463	6573
19	HEIDELBERG COLLEGE	B J MCBRIDE	LERC	M A RENO	NCC 3-174	6642
19	KENT STATE UNIV-KENT	A F HEPP	LERC	C V ABURTO	NCC 3-318	6650
19	UNIV OF CINCINNATI	J POUCH	LERC	V J KAPOOR	NCC 3-33	6810
19	UNIV OF DAYTON	R L THOMPSON	LERC	K P HALLINAN	NAG 3-1391	6828
19	UNIV OF TOLEDO	W E MORREN	LERC	K J DEWITT	NAG 3-577	6836
19	UNIV OF TOLEDO	R L THOMPSON	LERC	K J DEWITT	NAG 3-1501	6853

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
19	WILBERFORCE UNIV	A F HEPP	LERC	R L GLENN	NCC 3-281	6881
19	UNIV OKLAHOMA-NORMAN	P H JOHNSTON	LARC	R A KLINE	NAG 1-1375	6893
19	CARNEGIE-MELLON UNIV	R L THOMPSON	LERC	S GAROFF	NAG 3-1390	6981
19	CARNEGIE-MELLON UNIV	R L THOMPSON	LERC	N CHIGIER	NAG 3-1505	6983
19	CARNEGIE-MELLON UNIV	T MILLER	MSFC	J L ANDERSON	NAG 8-964	6985
19	PENN STATE U-UNIV PK	L J EARLY	GSFC	J D MITCHELL	NAG 6-7	7117
19	PENN STATE U-UNIV PK	J A NUTH	HQ	E D FEIGELSON	NAGW 2280	7137
19	PENN STATE U-UNIV PK	J A NUTH	HQ	A WOLSZCZAN	NAGW 3405	7150
19	PENN STATE U-UNIV PK	D K WEST	GSFC	R CORBETT	NAS 5-32489	7160
19	ST. VINCENT COLLEGE	W B KRABILL	GSFC	R E BERRY	NAG 5-689	7203
19	ST. VINCENT COLLEGE	W B KRABILL	GSFC	R E BERRY	NAG 5-5017	7204
19	UNIV OF PENNSYLVANIA	I D BROWNE	JSC	R MIDDLETON	NAG 9-608	7209
19	UNIV OF PITTSBURGH	A T CHAI	LERC	D JASNOW	NAG 3-1403	7219
19	UNIV OF PITTSBURGH	D NOEVER	MSFC	X L WU	NAG 8-959	7229
19	BROWN UNIVERSITY	J M HICKMAN	LERC	C M PIETERS (DR.)	NAG 3-1648	7263
19	BROWN UNIVERSITY	I D BROWNE	JSC	M J RUTHERFORD	NAG 9-575	7268
19	BROWN UNIVERSITY	W L QUAIDE	HQ	J HEAD	NAGW 2500	7278
19	BROWN UNIVERSITY	M C LEE	HQ	C ELBAUM	NAGW 3331	7280
19	CLEMSON UNIV-CLEMSON	I D BROWNE	JSC	D D CLAYTON	NAG 9-414	7344
19	CLEMSON UNIV-CLEMSON	J A NUTH	HQ	D D CLAYTON	NAGW 2305	7345
19	SO DAKOTA SCHL MINES	B A WIELICKI	LARC	R M WELCH	NAS 1-19077	7384
19	UNIV TENNESSEE-KNOXV	D KORNFIELD	MSFC	B N ANTAR	NAG 8-1089	7436
19	UNIV TENNESSEE-KNOXV	I D BROWNE	JSC	L A TAYLOR	NAG 9-415	7439
19	UNIV TENNESSEE-KNOXV	J K ALEXANDER	HQ	H Y MCSWEEN	NAGW 2800	7442
19	VANDERBILT UNIVERSITY	J A NUTH	HQ	D A WEINTRAUB	NAGW 3385	7472
19	LAMAR UNIVERSITY	T A SULLIVAN	JSC	J JORDAN	NAG 9-699	7509
19	PRAIRIE VIEW A&M U	R E HARTLE	GSFC	T S HUANG	NAG 5-2317	7511
19	PRAIRIE VIEW A&M U	C HERMAN	JSC	F C WANG	NAG 9-332	7513
19	PRAIRIE VIEW A&M U	E EMANUEL	JSC	A KUMAR	NAG 9-500	7514
19	RICE UNIVERSITY	W L QUAIDE	HQ	H VOIGT	NAGW 2893	7552
19	RICE UNIVERSITY	H C BRINTON	HQ	J W CHAMBERLAIN	NAGW 3536	7556
19	RICE UNIVERSITY	J T BERGSTRALH	HQ	P A CLOUTIER	NAGW 3811	7557
19	TEXAS A&M UNIVERSITY	H C NEEDLEMAN	GSFC	J NOEL	NAG 5-655	7612
19	UNIV HOUSTON	J T JAMES	JSC	W E WENTWORTH	NAG 9-742	7738
19	UNIV TEXAS-AUSTIN	J A SALZMAN	LERC	H L SWINNEY	NAG 3-1382	7829
19	UNIV TEXAS-AUSTIN	J J DEGNAN	GSFC	R J EANES	NAG 5-2146	7840
19	UNIV TEXAS-AUSTIN	D A NOEVER	MSFC	D J HEINZEN	NAG 8-1090	7845
19	UNIV TEXAS-AUSTIN	R G FORMAN	JSC	E BECKER	NAG 9-463	7849
19	UNIV TEXAS-AUSTIN	J A NUTH	HQ	W D COCHRAN	NAGW 2302	7870
19	UNIV TEXAS-AUSTIN	J A NUTH	HQ	P M HARVEY	NAGW 2323	7872
19	UNIV TEXAS-DALLAS	G D BULLOCK	GSFC	W HANSON	NAG 5-305	7938
19	UNIV TEXAS-DALLAS	G D BULLOCK	GSFC	R A HEELIS	NAG 5-306	7939
19	UNIV TEXAS-DALLAS	T L AGGSON	GSFC	W B HANSON	NAG 5-1641	7940
19	UNIV TEXAS-DALLAS	W L QUAIDO	HQ	R R HODGES	NAGW 2534	7944
19	UNIV TEXAS-DALLAS	W L QUAIDE	HQ	R R HODGES	NAGW 2535	7945
19	UNIV TEXAS-EL PASO	M R CARRUTH JR.	MSFC	P W WANG	NAG 8-1021	7956
19	UTAH STATE UNIV	G D BULLOCK	GSFC	A R BARAKAT	NAG 5-1546	8018
19	UTAH VALLEY CMTY COL	J L CREWS	JSC	T W LEE	NAG 9-496	8042
19	COLLEGE OF WM & MARY	E J PRIOR	LARC		NAS 1-19656	8073
19	COLLEGE OF WM & MARY	S A LONG	LARC	R L KIEFER	NCC 1-151	8079
19	HAMPTON UNIVERSITY	C HERMAN	JSC	A A ADEYIGA	NAG 9-333	8115
19	OLD DOMINION UNIV	D S MILLER	LARC	O BAYSAL	NAG 1-1150	8144
19	UNIV OF VIRGINIA	A L FRIPP	ARC	W A JESSER	NAG 1-350	8208
19	UNIV OF VIRGINIA	J A NUTH	GSFC	L U LILLELEHT	NAG 5-865	8230
19	UNIV OF VIRGINIA	J A NUTH	HQ	B DONN	NAGW 2313	8249
19	VIRGINIA STATE UNIV	J W WILSON	LARC	C E STRONACH	NAG 1-416	8412
19	VIRGINIA STATE UNIV	J W WILSON	LARC	J J STITH	NAG 1-765	8413
19	UNIV OF WASHINGTON	W L QUAIDE	HQ	C LEOVY	NAGW 2550	8479
19	UNIV OF WASHINGTON	W L QUAIDE	HQ	J E TILLMAN	NAGW 2982	8488
19	UNIV OF WASHINGTON	H C BRINTON	HQ	J E TILLMAN	NAGW 3381	8495

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
19	UNIV OF WASHINGTON	J A NUTH III	HQ	D BROWNLEE	NAGW 3636	8500
19	UNIV OF WASHINGTON	G MADDREA	LARC	P V HOBBS	NAS 1-18940	8511
19	MARQUETTE UNIVERSITY	S L LEHOCZKY	MSFC	R F BREBRICK	NAG 8-875	8614
19	UNIV WISC-MADISON	M B ROBINSON	MSFC	J PEREPEZKO	NAG 8-1068	8676
19	UNIV WISC-MADISON	W L QUAIDE	HQ	L A SROMOVSKY	NAGW 2411	8688
19	U PUERTO RICO-MAYAGZ	D K RUSSELL	HQ	A LEYDERMAN	NGT 00-070-392	8808
21	UNIV ALA-HUNTSVILLE	D K RUSSELL	HQ	R MCNIDER	NGT 00-070-366	1182
21	UNIV OF ARIZONA	D A HOLLAND	HQ	J C BAYGENTS	NGT 00-051-122	1553
21	UNIV CALIF-BERKELEY	M M WEISLOGEL	LERC	P CONCUS	NAG 3-1143	2058
21	UNIV CALIF-BERKELEY	M WEISLOGEL	LERC	P CONCUS	NCC 3-329	2194
21	UNIV CALIF-SAN DIEGO	S H GOLDSTEIN	JSC	J M RICLES	NAG 9-470	2537
21	CLARK ATLANTA UNIV	J N SHOOSMITH	LARC	R E MICKENS	NAG 1-410	3504
21	CLARK ATLANTA UNIV	J W GOODRICH	LERC	R E MICKENS	NAG 3-1411	3507
21	NORTHWESTERN UNIV	F C OWENS	HQ	S H DAVIS	NGT 00-050-769	3820
21	NORTHWESTERN UNIV	F C OWENS	HQ	S H DAVIS	NGT 00-050-781	3821
21	NORTHWESTERN UNIV	J ALEXANDER	HQ	B J MATROWSKI	NGT 00-050-902	3822
21	NORTHWESTERN UNIV	B CARPENTER	HQ	B CARPENTER	NGT 00-051-083	3824
21	UNIV ILLINOIS-URBANA	H D ROSS	LERC	J BUDCMERTOR	NAG 3-1247	3951
21	UNIV OF NEW ORLEANS	A JOYCE	SSC	T SOLANKY	NGT 00-051-213	4373
21	UNIV MARYLAND-COL PK	F C OWENS	HQ	L KANAL	NGT 00-050-718	4709
21	UNIV MARYLAND-COL PK	B SOFFEN	GSFC	C GREBOGI	NGT 00-070-283	4723
21	NORTHEASTERN UNIV	F C OWENS	HQ	M MATALON	NGT 00-050-608	5095
21	UNIV MICH-ANN ARBOR	J L THOMAS	LARC	B VAN LEER	NAG 1-869	5195
21	MISSISSIPPI STATE U	R E SMITH JR	LARC	J F THOMPSON	NSG-1577	5461
21	RENSSELAER POLY-NY	P HUNTER	HQ	D W SCHWENDEMAN	NGT 00-051-167	6184
21	STATE U NY-BINGHAMTN	F C OWENS	HQ	G KLIR	NGT 00-050-756	6226
21	DUKE UNIVERSITY	W F FORD	LERC	D A SMITH	NSG-3160	6347
21	FAYETTEVILLE STATE U	D GALLAWAY	HQ	L EDWARDS	NAGW 3083	6353
21	FAYETTEVILLE STATE U	B L WHITE	HQ	L EDWARDS	NGT 00-090-244	6356
21	NO CAROLINA STATE U	T EDWARDS	ARC	D S MCRAE	NCA 2-719	6404
21	UNIV N CAR-GRNSBORO	J VERNIKOS	ARC	D A LUDWIG	NCA 2-629	6448
21	NO DAKOTA STATE UNIV	W F FORD	LERC	D K COPE	NAG 3-1312	6455
21	CASE WESTERN RESERVE	A J DECKER	LERC	S H IZEN	NAG 3-832	6472
21	UNIV OF AKRON	P J OUZTS	LERC	P H SCHMIDT	NAG 3-1146	6747
21	PENN STATE U-UNIV PK	D V GALLAWAY	HQ	M K HEID	NGT 00-051-016	7187
21	BROWN UNIVERSITY	J T LYNCH	HQ	P F FISHER	NGT 00-051-029	7302
21	CLEMSON UNIV-CLEMSON	J A PENNLIN	LERC	J K PETERSON	NAG 3-1311	7339
21	CLEMSON UNIV-CLEMSON	D RUSSELL	HQ	J PETERSON	NGT 00-070-386	7359
21	LANE COLLEGE	W L HARRIS	HQ	W C MCCLURE	NAGW 3930	7399
21	RICE UNIVERSITY	K KIRSHEN	JSC	R O WELLS	NAG 9-681	7541
21	RICE UNIVERSITY	K KRISHEN	JSC	R O WELLS	NAG 9-748	7545
21	SAM HOUSTON ST UNIV	D L HENNINGER	JSC	C R HALLUM	NAG 9-749	7582
21	UNIV TEXAS-AUSTIN	R E SMITH	LARC	J KALLINDERIS	NAG 1-1459	7817
21	GEORGE MASON UNIV	L BERKE	LERC	R A POLYAK	NAG 3-1397	8093
21	HAMPTON UNIVERSITY	R E SMITH	LARC	M LAM	NAG 1-948	8108
21	OLD DOMINION UNIV	S E MASSENBERG	LARC	E M RUDISILL	NAG 1-1302	8148
21	UNIV OF VIRGINIA	D K RUSSELL	HQ	T PETERSON	NGT 00-070-339	8306
22	AUBURN UNIV-AUBURN	J HALE	MSFC	L MOORE	NAG 8-1019	1027
22	AUBURN UNIV-AUBURN	M E JACKSON	MSFC	A S HODEL	NAG 8-1040	1028
22	AUBURN UNIV-AUBURN	D HOLLAND	HQ	C MCCREARY	NGT 00-051-149	1042
22	OAKWOOD COLLEGE	H WAITES	MSFC	M ARMOUR	NAS 8-40194	1048
22	UNIV ALA-HUNTSVILLE	H M GOODMAN	MSFC	S J GRAVES	NAG 8-904	1112
22	UNIV ALA-HUNTSVILLE	R J KOCZOR	MSFC	S J GRAVES	NAS 8-38663	1155
22	UNIV ALA-HUNTSVILLE	H M GOODMAN	MSFC	S J GRAVES	NCC 8-21	1164
22	UNIV ALA-HUNTSVILLE	F C OWENS	HQ	S GRAVES	NGT 00-050-679	1171
22	UNIV OF ARIZONA	B N HOLBEN	GSFC	J A REAGAN	NAG 5-1712	1379
22	UNIV OF ARIZONA	J R FISCHER	GSFC	R A SCHOWENGERDT	NAG 5-2198	1382
22	UNIV OF ARIZONA	P HUNTER	HQ	R D SCHLICHTING	NGT 00-050-966	1550
22	CALIF INST OF TECH	H BURRITT	GSFC	S DJORGOVSKI	NAS 5-31348	1689
22	CAL STATE U-NRTHRIDGE	M HARTMAN	GSFC	D MILLER	NCA 5-116	1761

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
22	FOOTHILL-DEANZA SYST	D B MCKELLER	ARC	P YASUDA	NCC 2-785	1772
22	SAN FRAN STATE UNIV	P GRAMS	ARC	H SHAHNASSER	NCA 2-808	1795
22	SAN FRAN STATE UNIV	P GRAMS	ARC	H SHAHNASSER	NCC 2-5045	1802
22	SAN JOSE STATE UNIV	T A LASKINSKI	ARC	R K DODD	NAG 2-915	1807
22	SAN JOSE STATE UNIV	C C JORGENSEN	ARC	A PELLIONISZ	NCC 2-835	1849
22	SANTA CLARA UNIV	K G STEVENS JR.	ARC	H S ALKHATIB	NCC 2-644	1865
22	SANTA CLARA UNIV	T GRANT	ARC	Q LI	NCC 2-5082	1871
22	STANFORD UNIVERSITY	K G STEVENS JR.	ARC	S F LUNDSTROM	NAG 2-248	1882
22	STANFORD UNIVERSITY	P E FRIEDLAND	ARC	R E FIKES	NAG 2-581	1883
22	STANFORD UNIVERSITY	H LUM	ARC	J MCCARTHY	NAG 2-703	1888
22	STANFORD UNIVERSITY	P E FRIEDLAND	ARC	R M FIKES	NAG 2-887	1891
22	STANFORD UNIVERSITY	P E FRIEDLAND	ARC	D L DILL	NAG 2-891	1892
22	STANFORD UNIVERSITY	P E FRIEDLAND	ARC	Z MANNA	NAG 2-892	1893
22	STANFORD UNIVERSITY	T A LASHINSKI	ARC	L HESSELINK	NAG 2-911	1896
22	STANFORD UNIVERSITY	L B HOLCOMB	HQ	P M BANKS	NAGW 419	1913
22	STANFORD UNIVERSITY	D H BAILEY	ARC	G H GOLUB	NCA 2-669	1953
22	STANFORD UNIVERSITY	P E FRIEDLAND	ARC	L LEIFER	NCC 2-514	1978
22	STANFORD UNIVERSITY	P E FRIEDLAND	ARC	R E FIKES	NCC 2-537	1979
22	STANFORD UNIVERSITY	P E FRIEDLAND	ARC	E A FEIGENBAUM	NCC 2-749	1982
22	STANFORD UNIVERSITY	G ASRAR	HQ	G K YEH	NGT 00-030-115	2010
22	STANFORD UNIVERSITY	P HUNTER	HQ	M J FLYNN	NGT 00-050-964	2023
22	STANFORD UNIVERSITY	D K RUSSELL	HQ	R SHACHTER	NGT 00-070-342	2042
22	UNIV CALIF-BERKELEY	P E FRIEDLAND	ARC	L ZADEH	NCC 2-275	2184
22	UNIV CALIF-BERKELEY	K G STEVENS	ARC	A J SMITH	NCC 2-550	2186
22	UNIV CALIF-BERKELEY	P E FRIEDLAND	ARC	R MALINA	NCC 2-838	2188
22	UNIV CALIF-BERKELEY	G ASRAR	HQ	A JUELS	NGT 00-030-107	2200
22	UNIV CALIF-IRVINE	D E ECKHARDT JR	LARC	N G LEVESON	NAG 1-668	2303
22	UNIV CALIF-IRVINE	J E DORBAND	GSFC	I D SCHERSON	NAG 5-1897	2315
22	UNIV CALIF-IRVINE	D K RUSSELL	HQ	D RICHARDSON	NGT 00-070-352	2338
22	UNIV CALIF-L ANGELES	L E HYATT	GSFC	G APOSTOLAKIS	NAG 5-1440	2374
22	UNIV CALIF-L ANGELES	J R FISCHER	GSFC	R MUNTZ	NAG 5-2225	2385
22	UNIV CALIF-L ANGELES	G H MUCKLOW	HQ	R R MUNTZ	NAGW 3915	2453
22	UNIV CALIF-SAN DIEGO	J SCUDDER	GSFC	W FILLIUS	NAS 5-30549	2587
22	UNIV CALIF-SAN DIEGO	D WEST	GSFC	D E GRUBER	NAS 5-32069	2589
22	UNIV CALIF-SAN DIEGO	B SRIDHAR	ARC	R JAIN	NCC 2-792	2599
22	UNIV CALIF-S BARBARA	J R FISCHER	GSFC	Z WAN	NAG 5-2485	2633
22	UNIV CALIF-S BARBARA	G H MUCKLOW	HQ	T R SMITH	NAGW 3888	2653
22	UNIV CALIF-S BARBARA	G H MUCKLOW	HQ		NAGW 3951	2654
22	UNIV CALIF-S BARBARA	G ASRAR	HQ	Y CHEN	NGT 00-030-159	2667
22	UNIV CALIF-S CRUZ	A VAZIRI	ARC	J WILHELMS	NCC 2-717	2693
22	UNIV OF SOUTHERN CAL	P E FRIEDLAND	ARC	R NECHES	NAG 2-864	2712
22	UNIV OF SOUTHERN CAL	P FRIEDLAND	ARC	P ROSENBLOOM	NCC 2-538	2746
22	UNIV OF SOUTHERN CAL	H LUM	ARC	D W MIZELL	NCC 2-539	2747
22	UNIV OF SOUTHERN CAL	P E FRIEDLAND	ARC	R NECHES	NCC 2-719	2748
22	UNIV OF SOUTHERN CAL	H ASKHENES	GSFC	G A BEKEY	NGT 00-070-290	2754
22	COLORADO STATE UNIV	K A SMITH	LARC	J M BIEMAN	NAG 1-1461	2768
22	UNIV COLORADO-BOLDR	P E FRIEDLAND	ARC	R KING	NAG 2-862	2829
22	UNIV COLORADO-BOLDR	A C KELLY	GSFC	T P SPARN	NAG 5-1931	2873
22	UNIV COLORADO-BOLDR	K R MCDONALD	GSFC	W J EMERY	NAG 5-2577	2903
22	UNIV COLORADO-BOLDR	G H MUCKLOW	HQ	K E SIMMONS	NAGW 3887	3017
22	UNIV COLORADO-BOLDR	H BURRITT	GSFC	E HANSEN	NAS 5-31355	3029
22	UNIV COLORADO-BOLDR	P E FRIEDLAND	ARC	W J EMERY	NCC 2-842	3044
22	YALE UNIVERSITY	F C OWENS	HQ	D GELERNTER	NGT 00-050-719	3172
22	YALE UNIVERSITY	F C OWENS	HQ	D GELERNTER	NGT 00-050-858	3174
22	YALE UNIVERSITY	F C OWENS	HQ	D GELERNTER	NGT 00-050-859	3175
22	YALE UNIVERSITY	P HUNTER	HQ	S EISENSTAT	NGT 00-050-972	3176
22	FLA INTERNATIONAL U	B L WHITE	HQ	N RISHE	NAGW 4080	3288
22	UNIV OF CENTRAL FLA	N SLIWA	KSC	J M RAGUSA	NAG10-132	3385
22	UNIV OF CENTRAL FLA	T BARTH	KSC	W W SWART	NAG10-141	3387
22	EMORY UNIVERSITY	T A LASINSKI	ARC	V S SUNDERAM	NAG 2-828	3511

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
22	GEORGIA INST OF TECH	P E FRIEDLAND	ARC	S RUGABER	NAG 2-890	3535
22	GEORGIA INST OF TECH	W F TRUSZKOWSKI	GSFC	C M MITCHELL	NAG 5-1044	3549
22	GEORGIA INST OF TECH	W J POTTER	GSFC	C M MITCHELL	NAG 5-2226	3552
22	GEORGIA INST OF TECH	A W STOFFEL	GSFC	C M MITCHELL	NAG 5-2227	3553
22	GEORGIA INST OF TECH	G H MUCKLOW	HQ	K SCHWAN	NAGW 3886	3568
22	GEORGIA INST OF TECH	D HOLLAND	HQ	K SCHWAN	NGT 00-051-154	3598
22	GEORGIA INST OF TECH	P SMITH	HQ	J I CRAIG	NGT 00-051-250	3601
22	UNIV OF HAWAII-MANOA	J R FISCHER	GSFC	D Y YUN	NAG 5-2486	3670
22	UNIV OF HAWAII-MANOA	M MEDIN	ARC	T N NEILSON	NAS 2-13808	3738
22	UNIV OF HAWAII-MANOA	M NELSON	ARC	T N NEILSON	NAS 2-13894	3739
22	UNIV OF HAWAII-MANOA	M MODIN	ARC	T N NEILSON	NAS 2-14059	3740
22	NORTHWESTERN UNIV	K H ABBOTT	LARC	K D FORBUS	NAG 1-1343	3779
22	NORTHWESTERN UNIV	J R LEKASHMAN	ARC	P SCHEUERMANN	NAG 2-846	3781
22	NORTHWESTERN UNIV	J MALIN	JSC	K FORBUS	NAG 9-475	3801
22	UNIV ILLINOIS-URBANA	W H BRYANT	LARC	J W LIU	NAG 1-613	3930
22	UNIV ILLINOIS-URBANA	E BARSZCZ	ARC	L V KALE	NAG 2-897	3944
22	UNIV ILLINOIS-URBANA	E F STOCKER	GSFC	M FOLK	NAG 5-2040	3964
22	UNIV ILLINOIS-URBANA	J R FISCHER	GSFC	P E SAYLOR	NAG 5-2201	3966
22	UNIV ILLINOIS-URBANA	A W STOFFEL	GSFC	P M JONES	NAG 5-2244	3967
22	UNIV ILLINOIS-URBANA	J R FISCHER	GSFC	M L NORMAN	NAG 5-2493	3969
22	UNIV ILLINOIS-URBANA	F C OWENS	HQ	B W WAH	NGT 00-050-743	3996
22	UNIV ILLINOIS-URBANA	F C OWENS	HQ	R K IYER	NGT 00-050-833	3997
22	UNIV ILLINOIS-URBANA	S GOLDSTEIN	JSC	D GOLDBERG	NGT 00-050-873	3998
22	UNIV ILLINOIS-URBANA	M MOORE	ARC	D A REED	NGT 00-051-023	3999
22	UNIV ILLINOIS-URBANA	P SMITH	HQ	D PADUA	NGT 00-051-251	4002
22	INDIANA U-BLOOMINGTN	F C OWENS	HQ	S D JOHNSON	NGT 00-050-861	4033
22	PURDUE UNIVERSITY	R E SMITH	LARC	C BAJAJ	NAG 1-1473	4048
22	PURDUE UNIVERSITY	G H MUCKLOW	HQ	M F BAUMGARDNER	NAGW 3862	4085
22	PURDUE UNIVERSITY	J ALEXANDER	HQ	A ELMAGARMID	NGT 00-050-621	4098
22	PURDUE UNIVERSITY	F C OWENS	HQ	E N HOUSTIS	NGT 00-050-708	4100
22	PURDUE UNIVERSITY	F C OWENS	HQ	B BHARGAVA	NGT 00-050-779	4103
22	PURDUE UNIVERSITY	J ALEXANDER	HQ	E H SPAFFORD	NGT 00-050-919	4105
22	PURDUE UNIVERSITY	D HOLLAND	HQ	B BHARGAVA	NGT 00-051-284	4111
22	IOWA STATE UNIV	J R FISCHER	GSFC	E S TAKLE	NAG 5-2491	4166
22	UNIV OF IOWA	P SMITH	HQ	T RUS	NGT 00-051-321	4235
22	LA ST U&A&M COL-BRGE	A JOYCE	SSC	D L CARVER	NGT 00-051-015	4336
22	LA ST U&A&M COL-BRGE	A JOYCE	SSC	D L CARVER	NGT 00-051-214	4339
22	SO UNIV & A&M COL-BR	H L THEISS	HQ	E W HINDS	NAGW 4013	4352
22	TULANE UNIVERSITY	J R FISCHER	GSFC	B P BUCKLES	NAG 5-2216	4360
22	UNIV SOUTHWESTERN LA	A JOYCE	SSC	D MOREAU	NGT 00-051-007	4378
22	BOWIE STATE COLLEGE	W F TRUSZKOWSKI	GSFC	S SRIVASTAVA	NAG 5-2277	4387
22	BOWIE STATE COLLEGE	M MARGOLIS	HQ	C H KIRKSEY	NGT 00-090-016	4388
22	MORGAN STATE UNIV	G R BAKER	GSFC	E C HAMMOND JR.	NGT 00-090-236	4511
22	UNIV MARYLAND-COL PK	E J PRIOR	LARC	J H SALTZ	NAG 1-1485	4527
22	UNIV MARYLAND-COL PK	G W WALKER	LARC	C Z SUN	NAG 1-1521	4528
22	UNIV MARYLAND-COL PK	R G WILMOTH	LARC	J SALTZ	NAG 1-1560	4531
22	UNIV MARYLAND-COL PK	S SAMADI	GSFC	A J FLEIG	NAG 5-2107	4583
22	UNIV MARYLAND-COL PK	J R FISCHER	GSFC	J M STONE	NAG 5-2202	4585
22	UNIV MARYLAND-COL PK	J R FISCHER	GSFC	L DAVIS	NAG 5-2482	4603
22	UNIV MARYLAND-COL PK	D M BUTLER	HQ	Y QIAN	NGT 00-030-038	4700
22	UNIV MARYLAND-COL PK	E LUCIER	HQ	H SOMET	NGT 00-030-242	4705
22	UNIV MARYLAND-COL PK	F C OWENS	HQ	B SHNEIDERMAN	NGT 00-050-762	4711
22	UNIV MARYLAND-COL PK	R PAJERSKI	GSFC	V R BASILI	NSG-5123	4725
22	MASS INST OF TECH	P E FRIEDLAND	ARC	L R YOUNG	NCC 2-570	5057
22	MASS INST OF TECH	F C OWENS	HQ	R A BROOKS	NGT 00-050-835	5074
22	MASS INST OF TECH	D HOLLAND	HQ	L MCKNIGHT	NGT 00-051-330	5083
22	UNIV OF MASS-LOWELL	A JOYCE	SSC	G G GRINSTEIN	NGT 00-051-217	5104
22	UNIV OF MASS-AMHERST	D K RUSSELL	HQ	P COHEN	NGT 00-070-358	5134
22	WORCESTER POLY INST	G CHIN	GSFC	F U BORIAKOFF	NAG 5-1138	5149
22	HOPE COLLEGE	D E ECKHARDT	LARC	M J JIPPING	NAG 1-1480	5161

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
22	MICHIGAN STATE UNIV	J R FISCHER	GSFC	R F STEIN	NAG 5-2489	5170
22	MICHIGAN STATE UNIV	D K RUSSELL	HQ	B H CHENG	NGT 00-070-376	5177
22	UNIV MICH-ANN ARBOR	R W BUTLER	LARC	K G SHIN	NAG 1-492	5194
22	UNIV MICH-ANN ARBOR	A L WHITE	LARC	K G SHIN	NAG 1-1220	5197
22	UNIV MICH-ANN ARBOR	A L WHITE	LARC	K G SHIN	NAG 1-1493	5206
22	UNIV MICH-ANN ARBOR	P E FRIEDLAND	ARC	R A VOLZ	NCC 2-517	5317
22	UNIV MICH-ANN ARBOR	S GOLDSTEIN	JSC	J T HOLLAND	NGT 00-051-057	5336
22	UNIV MICH-ANN ARBOR	D HOLLAND	HQ	E A RUNDENSTEINER	NGT 00-051-126	5339
22	WAYNE STATE UNIV	G F FOLLEN	LERC	E YAPRAK	NAG 3-1569	5354
22	WAYNE STATE UNIV	D HOLLAND	HQ	R G REYNOLDS	NGT 00-051-074	5358
22	U MINN-MNPLS-ST PAUL	T A LASINSKI	ARC	Y SAAD	NAG 2-904	5374
22	U MINN-MNPLS-ST PAUL	J K ALEXANDER	HQ	D A YUEN	NAGW 1584	5393
22	U MINN-MNPLS-ST PAUL	F C OWENS	HQ	J V CARLIS	NGT 00-050-785	5425
22	MISSISSIPPI STATE U	T A LASINSKI	ARC	M L STOKES	NAG 2-824	5441
22	MISS VALLEY ST UNIV	F SIX	MSFC	R WILLIAMS	NAG 8-225	5462
22	UNIV SO MISSISSIPPI	D K RUSSELL	HQ	G H RAYBORN	NGT 00-070-394	5476
22	UNIV NEBRASKA-LINCLN	D HOLLAND	HQ	S E REICHENBACH	NGT 00-051-293	5602
22	DARTMOUTH COLLEGE	B T BLAYLOCK	ARC	D F KOTZ	NAG 2-936	5620
22	DARTMOUTH COLLEGE	R L CARTER	ARC	D F KOTZ	NCC 2-849	5642
22	PRINCETON UNIVERSITY	D K RUSSELL	HQ	G KARNIADAKIS	NGT 00-070-289	5783
22	RUTGERS ST U-N BRNSK	P E FRIEDLAND	ARC	S AMAREL	NAG 2-645	5786
22	RUTGERS ST U-N BRNSK	H LUM	ARC	S Y LEVY	NAG 2-668	5787
22	RUTGERS ST U-N BRNSK	T A LASINSKI	ARC	D SILVER	NAG 2-829	5790
22	RUTGERS ST U-N BRNSK	P E FRIEDLAND	ARC	T ELLMAN	NCC 2-802	5797
22	CITY U NY-STATEN ISL	B JACOBS	GSFC	M TAUSNER	NAG 5-2291	5911
22	COLUMBIA UNIVERSITY	F C OWENS	HQ	G E KAISER	NGT 00-050-583	6002
22	CORNELL UNIVERSITY	P E FRIEDLAND	ARC	F B SCHNEIDER	NAG 2-893	6021
22	CORNELL UNIVERSITY	G L WEEGMANN	LERC	A HANUSHEVSKY	NAG 3-1358	6027
22	CORNELL UNIVERSITY	F C OWENS	HQ	R L CONSTABLE	NGT 00-050-786	6101
22	NEW YORK UNIVERSITY	D E ECKHARDT	LARC	E WEYUKER	NAG 1-1238	6130
22	NIAGARA UNIVERSITY	R BLAKESLEE	MSFC	W L BOECK	NCC 8-24	6138
22	POLYTECHNIC U	C W MEISSNER	LARC	M L SHOOMAN	NCC 1-190	6147
22	RENSSELAER POLY-NY	J L ROGERS	LARC	P HAJELA	NAG 1-1269	6150
22	RENSSELAER POLY-NY	D K RUSSELL	HQ	B SZYMANSKI	NGT 00-070-334	6187
22	STATE UNIV NY-BUFFAL	R W CLAUS	LERC	P W DOWD	NAG 3-1548	6233
22	SYRACUSE UNIVERSITY	K G STEVENS	ARC	G C FOX	NAG 2-821	6298
22	APPALACHIAN STATE U	T S ABBOTT	LARC	C R RUSSELL	NAG 1-1321	6324
22	DUKE UNIVERSITY	A PATTERSON-HINE	ARC	J B DUGAN	NCA 2-617	6336
22	DUKE UNIVERSITY	M A BOYD	ARC	J B DUGAN	NCA 2-825	6337
22	DUKE UNIVERSITY	M MOORE	ARC	J B DUGAN	NGT 00-051-313	6345
22	NO CAROLINA STATE U	D E ECKHARDT	LARC	M A VOUK	NAG 1-983	6378
22	CASE WESTERN RESERVE	D J ARPASI	LERC	C A PAPACHRISTOU	NAG 3-1103	6479
22	CASE WESTERN RESERVE	M D BETHEA	LERC	K VADAPARTY	NCC 3-264	6537
22	CASE WESTERN RESERVE	M D BETHEA	LERC	G W ERNST	NCC 3-340	6553
22	CENTRAL ST UNIV-OHIO	J J PELOUCH	LERC	K DEZHGHOSHA	NAG 3-1554	6575
22	CLEVELAND STATE UNIV	G YOLKN	LERC	J SCHOEFFLER	NAG 3-1441	6588
22	CLEVELAND STATE UNIV	D RUSSELL	HQ	S MISRA	NGT 00-070-396	6633
22	KENT STATE UNIV-KENT	F N GOLDBERG	LERC	C M BAKES	NCC 3-235	6649
22	KENT STATE UNIV-KENT	P HUNTER	HQ	J POTTER	NGT 00-051-161	6651
22	OHIO STATE UNIV	B P CURLETT	LERC	F OZGUNER	NAG 3-1369	6672
22	OHIO STATE UNIV	G J FOLLEN	LERC	F OZGUNER	NAG 3-1440	6676
22	OHIO STATE UNIV	J MALIN	JSC	D D WOODS	NAG 9-390	6695
22	OHIO STATE UNIV	J MALIN	JSC	D D WOODS	NAG 9-677	6696
22	UNIV OF CINCINNATI	N SLIWA	KSC	H T THURMAN	NAG10-124	6805
22	UNIV OF TOLEDO	G H STEVENS	LERC	S C KWATRA	NAG 3-157	6835
22	UNIV OF TULSA	R W WILLS	LARC	M TIMMERMAN	NAG 1-1579	6908
22	OREGON STATE UNIV	P E FRIEDLAND	ARC	T G DIETRICH	NAG 2-630	6918
22	UNIV OREGON-EUGENE	K G STEVENS	ARC	A MALONY	NGT 00-051-307	6972
22	BUCKNELL UNIVERSITY	J E DORBAND	GSFC	M F ABURDENE	NAG 5-2509	6974
22	CARNEGIE-MELLON UNIV	J M VRANISH	GSFC	F PRINZ	NAG 5-1468	6984

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
22	CARNEGIE-MELLON UNIV	P E FRIEDLAND	ARC	S F SMITH	NCC 2-707	6994
22	CARNEGIE-MELLON UNIV	P HUNTER	HQ	H T KUNG	NGT 00-050-965	7001
22	CARNEGIE-MELLON UNIV	M MOORE	ARC	S A SHAFER	NGT 00-051-026	7004
22	CARNEGIE-MELLON UNIV	P HUNTER	HQ	J M PEHA	NGT 00-051-162	7007
22	CARNEGIE-MELLON UNIV	C HIX	JPL	M ERDMANN	NGT 00-051-272	7009
22	CARNEGIE-MELLON UNIV	C HIX	JPL	W WHITTAKER	NGT 00-051-275	7010
22	CARNEGIE-MELLON UNIV	D HOLLAND	HQ	C THORPE	NGT 00-051-292	7011
22	PENN STATE U-UNIV PK	B SRIDHAR	ARC	R KASTURI	NCC 2-853	7171
22	BROWN UNIVERSITY	T A LASINSKI	ARC	A DAM	NAG 2-830	7261
22	UNIV OF RHODE ISLAND	G H MUCKLOW	HQ	P CORNILLION	NAGW 3890	7327
22	CLEMSON UNIV-CLEMSON	F C OWENS	HQ	W B LIGON	NGT 00-050-419	7355
22	UNIV SO CAROLINA-COL	J T LYNCH	HQ	J R ROSE	NGT 00-051-315	7374
22	MEMPHIS ST UNIV	D K RUSSELL	HQ	M GARZON	NGT 00-070-369	7406
22	TENNESSEE TECH U	R JUDAY	JSC	P K BAJAN	NAG 9-710	7422
22	UNIV TENNESSEE-KNOXV	G J FOLLEN	LERC	J DOWGARRA	NAG 3-1573	7432
22	VANDERBILT UNIVERSTY	P E FRIEDLAND	ARC	D H FISHER	NAG 2-834	7457
22	HOUSTON COMM. COLL.	R BURKE	JSC	G MORENO	NCC 9-28	7497
22	RICE UNIVERSITY	J R FISCHER	GSFC	K KENNEDY	NAG 5-2736	7535
22	RICE UNIVERSITY	F C OWENS	HQ	W ZWAENEPOEL	NGT 00-050-580	7568
22	RICE UNIVERSITY	F C OWENS	HQ	J BENNETT	NGT 00-050-746	7570
22	TEXAS A&M UNIVERSITY	M GAUNCE	JSC	G E HITE	NAG 9-735	7641
22	TEXAS A&M UNIVERSITY	A GOFOZTH	ARC	W WEIZHAO	NCC 2-770	7662
22	TEXAS A&M UNIVERSITY	A GOFORTH	ARC	R A VOLZ	NCC 2-791	7663
22	TEXAS A&M UNIVERSITY	F C OWENS	HQ	J YEN	NGT 00-050-738	7670
22	TEXAS A&M UNIVERSITY	F C OWENS	HQ	G YEN	NGT 00-050-837	7671
22	UNIV HOUSTON	R T SAVELY	JSC	R B LOFTIN	NAG 9-405	7719
22	UNIV HOUSTON	C CULBERT	JSC	R B LOFTIN	NAG 9-713	7736
22	U TEX-PAN AM-EDNBURG	N G ROBERTSON	JSC	S E DAVIDSON	NAG 9-767	7771
22	UNIV HOUSTON-CL LAKE	P A MARTINEZ	JSC	S DAVARI	NAG 9-584	7798
22	UNIV HOUSTON-CL LAKE	D M PRUETT	JSC	T F LEIBFRIED	NAG 9-737	7802
22	UNIV HOUSTON-CL LAKE	R B MACDONALD	JSC	E T DICKERSON	NCC 9-16	7803
22	UNIV HOUSTON-CL LAKE	R T SAVELY	JSC	S L GERHART	NCC 9-30	7804
22	UNIV TEXAS-ARLINGTON	E PRIOR	LARC	S M YANG	NGT 00-050-896	7813
22	UNIV TEXAS-AUSTIN	J R FISCHER	GSFC	M G PANDY	NAG 5-2217	7841
22	UNIV TEXAS-AUSTIN	J R FISHER	GSFC	R A VAN DE GEI JN	NAG 5-2497	7843
22	UNIV TEXAS-AUSTIN	J R FISHER	GSFC	B E SCHUTZ	NAG 5-2511	7844
22	UNIV TEXAS-AUSTIN	J T MALIN	JSC	B KUIPERS	NAG 9-665	7854
22	UNIV TEXAS-AUSTIN	M E RORVIG	JSC	C H WARLICK	NAG 9-745	7861
22	UNIV TEXAS-AUSTIN	P E FRIEDLAND	ARC	B J KUIPERS	NCC 2-760	7902
22	UNIV TEXAS-AUSTIN	F C OWENS	HQ	B E SCHUTZ	NGT 00-050-422	7912
22	UNIV TEXAS-AUSTIN	F C OWENS	HQ	R F SIMMONS	NGT 00-050-594	7914
22	UNIV TEXAS-AUSTIN	F C OWENS	HQ	R MOONEY	NGT 00-050-732	7917
22	UNIV TEXAS-AUSTIN	D HOLLAND	HQ	R MOONEY	NGT 00-051-332	7927
22	UNIV TEXAS-EL PASO	D LAWLER	JSC	S A STARKS	NAG 9-479	7958
22	UNIV TEXAS-EL PASO	R N LEA	JSC	V KREINOVICH	NAG 9-482	7960
22	UNIV OF UTAH	J R FISCHER	GSFC	V J MATHEWS	NAG 5-2200	8000
22	NORWITCH UNIVERSITY	D STILWELL	JSC	P N BARTRAM	NAG 9-312	8047
22	COLLEGE OF WM & MARY	D E ECKHARDT	LARC	K W MILLER	NAG 1-884	8061
22	COLLEGE OF WM & MARY	R J KEYNTON	LARC	D M NICHOL	NAG 1-995	8062
22	COLLEGE OF WM & MARY	W H BRYANT	LARC	D M NICHOL	NAG 1-1060	8064
22	COLLEGE OF WM & MARY	P C SCHUTTE	LARC	S FEYOCK	NCC 1-159	8080
22	COLLEGE OF WM & MARY	E J PRIOR	LARC	S K PARK	NGT 00-070-247	8085
22	COLLEGE OF WM & MARY	D K RUSSELL	HQ	S FEYOCK	NGT 00-070-306	8087
22	COLLEGE OF WM & MARY	D K RUSSELL	HQ	S PARK	NGT 00-070-381	8088
22	GEORGE MASON UNIV	W TRUSZKOWSKI	GSFC	H GOMMA	NAG 5-2247	8096
22	GEORGE MASON UNIV	J R FISCHER	GSFC	D H SCHAEFER	NAG 5-2327	8098
22	GEORGE MASON UNIV	J E DORBAND	GSFC	P WANG	NAG 5-2554	8101
22	HAMPTON UNIVERSITY	W H BRYANT	LARC	R CEZZAR	NAG 1-949	8109
22	OLD DOMINION UNIV	D E ECKHARDT	LARC	C D WILD	NAG 1-439	8133
22	OLD DOMINION UNIV	N D MURRAY	LARC	K MALY	NAG 1-908	8138

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
22	OLD DOMINION UNIV	W H BRYANT	LARC	R MUKKAMALA	NAG 1-1114	8142
22	OLD DOMINION UNIV	D E ECKHARDT	LARC	C WILD	NAG 1-1426	8151
22	OLD DOMINION UNIV	M D SALAS	LARC	K MALY	NAG 1-1550	8157
22	OLD DOMINION UNIV	L F ROWELL	LARC	J L SCHWING	NCC 1-99	8176
22	OLD DOMINION UNIV	D K RUSSELL	HQ	J L SCHWING	NGT 00-070-382	8200
22	UNIV OF RICHMOND	C M HOLLOWAY	LARC	A CHARLESWORTH	NAG 1-774	8206
22	UNIV OF VIRGINIA	W H BRYANT	LARC	J M ORTEGA	NAG 1-242	8207
22	UNIV OF VIRGINIA	D E ECKHARDT	LARC	J C KNIGHT	NAG 1-1123	8214
22	UNIV OF VIRGINIA	J J LAMBIOTTE	LARC	J M ORTEGA	NAG 1-1529	8219
22	UNIV OF VIRGINIA	T A LASINSKI	ARC	R PAUSCH	NAG 2-845	8221
22	UNIV OF VIRGINIA	K M SCHAEFFER	HQ	J C FRENCH	NAGW 4096	8259
22	UNIV OF VIRGINIA	C R ELKS	LARC	B W JOHNSON	NCC 1-173	8264
22	UNIV OF VIRGINIA	P HUNTER	HQ	A S GRIMSHAW	NGT 00-050-970	8286
22	UNIV OF VIRGINIA	G SOFFEN	GSFC	J C FRENCH	NGT 00-051-018	8287
22	UNIV OF VIRGINIA	P HUNTER	HQ	A S GRIMSHAW	NGT 00-051-163	8293
22	UNIV OF VIRGINIA	D K RUSSELL	HQ	J C FRENCH	NGT 00-070-286	8303
22	UNIV OF WASHINGTON	D E ECKHARDT	LARC	N G LEVESON	NAG 1-1495	8424
22	UNIV OF WASHINGTON	T A LASINSKI	ARC	G TURKIYYAH	NAG 2-831	8433
22	UNIV OF WASHINGTON	F C OWENS	HQ	S HANKS	NGT 00-050-822	8553
22	UNIV OF WASHINGTON	M MOORE	ARC	S HANKS	NGT 00-051-309	8560
22	UNIV OF WASHINGTON	D K RUSSELL	HQ	N LEVESON	NGT 00-070-357	8563
22	WASHINGTON ST UNIV	P E FRIEDLAND	ARC	J C SCHLIMMER	NCC 2-794	8574
22	WEST VIRGINIA UNIV	J GITELMAN	GSFC	J T JUREWICZ	NAG 5-2129	8587
22	MARQUETTE UNIVERSITY	J R FISCHER	GSFC	X FENG	NAG 5-2199	8611
22	UNIV WISC-MADISON	H L NGUYEN	LERC	R D REITZ	NAG 3-1087	8629
22	UNIV WISC-MADISON	G H MUCKLOW	HQ	D J DEWITT	NAGW 3895	8714
22	UNIV WISC-MADISON	G H MUCKLOW	HQ	M LIVNY	NAGW 3914	8716
22	UNIV WISC-MADISON	G H MUCKLOW	HQ	R RAMAKRISHNAN	NAGW 3921	8717
22	UNIV WISC-MADISON	S GOLDSTEIN	JSC	H YUTTEN	NGT 00-051-177	8752
22	UNIV WISC-MADISON	P H SMITH	HQ	B P MILLER	NGT 00-051-368	8757
22	UNIV WISC-MADISON	D K RUSSELL	HQ	J W SHAVIK	NGT 00-070-377	8758
22	UNIV OF WYOMING	P E FRIEDLAND	ARC	J V BALLEEN	NAG 2-877	8770
22	UNIV OF WYOMING	S H GOLDSTEIN	JSC	M MAGEE	NAG 9-634	8774
29	ALABAMA A&M UNIV	G H FICHTL	MSFC	E C TEMPLE	NAG 8-200	1007
29	TUSKEGEE UNIVERSITY	B WALKER	MSFC	C J WANG	NAG 8-296	1060
29	UNIV ALA-HUNTSVILLE	S L LEHOCZKY	MSFC	F E ROSENBERGER	NAG 8-790	1105
29	UNIV ALA-HUNTSVILLE	W ANDERSON	MSFC	J ZIEBARTH	NAG 8-987	1118
29	UNIV ALA-HUNTSVILLE	W ANDERSON	MSFC	A W LORBACK	NAG 8-1086	1125
29	UNIV ALA-HUNTSVILLE	J W KAUFMAN	MSFC	R T MC NIDER	NAS 8-36718	1148
29	UNIV ARKANSAS-FAYETV	J J GAREGNANI	HQ	W F LIMP	NAGW 4117	1576
29	CAL POLY ST U-S LUIS	L J SCHILLING	ARC	D BIEZAD	NAG 2-833	1722
29	SAN JOSE STATE UNIV	Y BARNIV	ARC	Y BARAM	NCC 2-703	1843
29	STANFORD UNIVERSITY	J O LARIMER	ARC	A M PETERSON	NCC 2-777	1983
29	STANFORD UNIVERSITY	J D SARGLE	ARC	D L DONOHO	NCC 2-5100	2005
29	UNIV CALIF-BERKELEY	H ASHKENAS	JPL	L A ZADEU	NGT 00-050-892	2215
29	UNIV CALIF-DAVIS	D S CHAUSSEE	ARC	J J CHATTOT	NCC 2-5086	2293
29	GEORGE WASHINGTON U	M D SALAS	LARC	R LOHNER	NAG 1-1386	3212
29	CATHOLIC UNIVERSITY	L PURVES	GSFC	C C NGUYEN	NAG 5-1415	3261
29	UNIV DIST COLUMBIA	Y B FREEMAN	HQ	W R COLEMAN	NAGW 2045	3275
29	GEORGIA INST OF TECH		MSFC	W PUTNAM	NAG 8-194	3554
29	GEORGIA INST OF TECH	M RUDISILL	JSC	C M MITCHELL	NAG 9-422	3558
29	GEORGIA INST OF TECH	J A VILLARREAL	JSC	A O ESGOBUE	NAG 9-726	3559
29	GEORGIA INST OF TECH	T BENTSEN	HQ	W D HUNT	NAGW 2753	3562
29	UNIV OF GEORGIA	B F HANNAN	HQ	J GIBSON	NASW 4670	3649
29	ILL BENEDICTINE COLL	F SIX	MSFC	D NOHL	NAG 8-224	3768
29	NORTHWESTERN UNIV	C J CULBERT	JSC	J E COLGATE	NAG 9-734	3802
29	NORTHWESTERN UNIV	P GOORJIAN	ARC	A TAFLOVE	NCA 2-727	3815
29	UNIV ILLINOIS-URBANA	C W PUTT	LERC	A SAMEH	NAG 3-1208	3950
29	IND U-PURDUE-INDAPLS	R A BLECH	LERC	A ECER	NAG 3-1246	4017
29	UNIV OF KENTUCKY	P W GOODE	LARC	R MEHROTRA	NAG 1-1276	4289

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
29	TULANE UNIVERSITY	A JOYCE	SSC	J B ELSTROTT	NGT 00-051-012	4369
29	MORGAN STATE UNIV	K H ABBOTT	LARC	A L TEATE	NAG 1-1492	4501
29	MORGAN STATE UNIV	J BENNETT	GSFC	W LUPTON	NAG 5-2408	4503
29	MASS INST OF TECH	G J FOLLEN	LERC	R HAIMES	NCC 3-256	5061
29	MT HOLYOKE COLLEGE	B L WHITE	HQ	J MORROW	NAGW 1792	5093
29	U MINN-MNPLS-ST PAUL	C LI	JSC	T TEZDYUAR	NAG 9-449	5389
29	MISSISSIPPI STATE U	B GUYNES	MSFC	S BALLINGTON	NAG 8-1012	5451
29	MISSISSIPPI STATE U	G A WILHOLD	MSFC	B K SONI	NAS 8-38857	5455
29	DARTMOUTH COLLEGE	P HUNTER	HQ	D KOTZ	NGT 00-051-160	5646
29	STEVENS INST OF TECH	B L WHITE	HQ	T G WILLIAMS	NAGW 1877	5814
29	UNIV OF NEW MEXICO	R J HAYDUK	HQ	G MAKI	NAGW 3293	5885
29	COLUMBIA UNIVERSITY	Y FREEMAN	JPL	G LOPEZ	NAGW 2668	5976
29	SYRACUSE UNIVERSITY	G B FINELLI	LARC	A L GOEL	NAG 1-1401	6297
29	JOHNSON C SMITH UNIV	J R SCOTT	LERC	J O ADEYEYE	NAG 3-1623	6358
29	CLEVELAND STATE UNIV	D P MORILAK	LERC	Y A LIOU	NAG 3-1482	6589
29	CLEVELAND STATE UNIV	G F FOLLEN	LERC	H LEWANDOSKI	NAG 3-1560	6593
29	CLEVELAND STATE UNIV	D P MORILAK	LERC	Y A LIOU	NAG 3-1593	6594
29	CLEVELAND STATE UNIV	G MACKSON	LERC	C LIN	NAG 3-1601	6595
29	CLEVELAND STATE UNIV	T K GLASGOW	LERC	G L KRAMERICH	NCC 3-41	6598
29	CARNEGIE-MELLON UNIV	P W GOODE	LARC	P K KHOSLA	NAG 1-1075	6976
29	PENN STATE U-UNIV PK	R L HARRIS	LARC	R KASTURI	NAG 1-1371	7050
29	LAMAR UNIVERSITY	N H CHAFFEE	JSC	V D NGUYEN	NAG 9-695	7505
29	UNIV HOUSTON	J A VILLARREAL	JSC	J B WILLIS	NAG 9-562	7726
29	UNIV HOUSTON	C M HOSKINS	JSC	R A ALO	NAG 9-657	7731
29	UNIV HOUSTON-CL LAKE	M S MARGOLIS	HQ	G SAWYER	NGT 00-090-031	7805
29	UNIV TEXAS-EL PASO	D R GLOVER	LERC	S D CABRERA	NAG 3-1380	7955
29	UNIV TEXAS-S ANTONIO	J D ATKINSON	JSC	W ALTER	NAG 9-554	7978
29	COLLEGE OF WM & MARY	D L PALUMBO	LARC	D M NICOL	NAG 1-1132	8066
29	NORFOLK STATE UNIV	J J LAMBIOTTE	LARC	S N SHAH	NAG 1-764	8121
29	NORFOLK STATE UNIV	J J LAMBIOTTE	LARC	S N SHAH	NAG 1-1536	8126
29	OLD DOMINION UNIV	K J HAYHURST	LARC	L WILSON	NAG 1-750	8135
29	OLD DOMINION UNIV	G B FINELLI	LARC	C M OVERSTREET	NAG 1-902	8137
29	OLD DOMINION UNIV	P W GOODE	LARC	R MIELKE	NAG 1-1223	8146
29	OLD DOMINION UNIV	J R SCOTT	LARC	A O DEMUREN	NAG 3-1329	8166
29	UNIV OF VIRGINIA	A L OVERMAN	LARC	J M ORTEGA	NAG 1-1112	8213
29	UNIV OF VIRGINIA	F C OWENS	HQ	J M ORTEGA	NGT 00-070-163	8297
29	UNIV OF VIRGINIA	F C OWENS	HQ	J M ORTEGA	NGT 00-070-164	8298
29	UNIV OF VIRGINIA	F C OWENS	HQ	J M ORTEGA	NGT 00-070-229	8301
29	UNIV OF WYOMING	S H GOLDSTEIN	JSC	R E GANTENBEIN	NAG 9-722	8775
31	ALABAMA A&M UNIV	G FICHTL	MSFC	LIAU	NAG 8-201	1008
31	AUBURN UNIV-AUBURN	C R CHAPPELL	MSFC	J D PEREZ	NAG 8-147	1022
31	UNIV ALA-HUNTSVILLE	S A FIELDS	MSFC	C E KEFFER	NAG 8-834	1107
31	UNIV ALA-HUNTSVILLE	E J REICHMANN	MSFC	J B SMITH	NAG 8-888	1111
31	UNIV ALA-HUNTSVILLE	D CARTER	MSFC	F ROSENBERGER	NAG 8-950	1115
31	UNIV ALA-HUNTSVILLE	J LAUE	MSFC	N STON	NAS 8-37107	1151
31	UNIV ALA-HUNTSVILLE	J E ARNOLD	MSFC	S Q KIDDER	NAS 8-38776	1157
31	UNIV ALA-HUNTSVILLE	F LESLIE	MSFC	S R CHRISTY	NAS 8-38789	1158
31	UNIV ALA-HUNTSVILLE	J E ARNOLD	MSFC	R LEE	NCC 8-22	1165
31	UNIV ALA-TUSCALOOSA	J T BERGSTALH	HQ	R H TIPPING	NAGW 3785	1210
31	UNIV ALASKA-FAIRBNKS	B J FLOWERS	GSFC	S A KASOFU	NAG 5-699	1224
31	UNIV ALASKA-FAIRBNKS	R D MCPETERS	HQ	K STAMNES	NAGW 2165	1237
31	UNIV ALASKA-FAIRBNKS	J T SUTTERS	HQ	G E SHAW	NAGW 3728	1253
31	UNIV ALASKA-FAIRBNKS	W A BRENCE	GSFC	C DEEHR	NAS 5-31637	1256
31	UNIV ALASKA-FAIRBNKS	T T LITTLE	MSFC	E M WESCOTT	NAS 8-36321	1258
31	UNIV OF ARIZONA	L E LASHER	ARC	M G TOMASKO	NAG 2-906	1362
31	UNIV OF ARIZONA	R D MCPETERS	GSFC	B M HERMAN	NAG 5-1496	1375
31	UNIV OF ARIZONA	W LAU	GSFC	R E DICKINSON	NAG 5-1642	1377
31	UNIV OF ARIZONA	M D KING	GSFC	B H HERMAN	NAG 5-2384	1389
31	UNIV OF ARIZONA	J W KAUFMAN	MSFC	J A ZEHNDER	NAG 8-889	1400
31	UNIV OF ARIZONA	C L JOHNSON	MSFC	A L BROADFOOT	NAG 8-1079	1404

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	UNIV OF ARIZONA	R D MCPETERS	HQ	L L HOOD	NAGW 909	1416
31	UNIV OF ARIZONA	J T BERGSTRALH	HQ	J I LUNINE	NAGW 1039	1418
31	UNIV OF ARIZONA	M BALTUCK	HQ	C CHASE	NAGW 3166	1474
31	UNIV OF ARIZONA	J T BERGSTRAHL	HQ	S W BOUGHER	NAGW 3432	1486
31	UNIV OF ARIZONA	W JAFFERIS	KSC	E P KRIDER	NAG10-92	1510
31	UNIV OF ARIZONA	G L MADDREA JR	LARC	B M HERMAN	NAS 1-18939	1512
31	UNIV OF ARIZONA	G L MADDREA	LARC	J A REAGAN	NAS 1-19953	1513
31	UNIV OF ARIZONA	J R RICHARDS	GSFC	D HUNTEN	NAS 5-30124	1515
31	UNIV OF ARIZONA	H OSEROFF	GSFC	A HUETE	NAS 5-31364	1517
31	UNIV OF ARIZONA	L STUART	GSFC	P N SLATER	NAS 5-31717	1518
31	UNIV OF ARIZONA	J D SPINHIRNE	GSFC	J A REAGAN	NCC 5-77	1527
31	UNIV OF ARIZONA	G ASRAR	HQ	C L GROTEBECK	NGT 00-030-021	1530
31	UNIV OF ARIZONA	F C OWENS	HQ	H P LARSON	NGT 00-050-782	1545
31	UNIV OF ARIZONA	A NOVOTNY	HQ	P N SLATER	NGT 00-051-219	1558
31	UNIV OF ARIZONA	G BULLOCK	GSFC	E C STONE	NAG 5-727	1592
31	CALIF INST OF TECH	C H JACKMAN	HQ	Y L YUNG	NAGW 413	1628
31	CALIF INST OF TECH	J D RUMMEL	HQ	Y L YUNG	NAGW 1538	1633
31	CALIF INST OF TECH	M J KURYLO	HQ	M OKUMARA	NAGW 3893	1681
31	CALIF INST OF TECH	G ASRAR	HQ	M F GERSTELL	NGT 00-030-135	1695
31	CALIF INST OF TECH	S HIPSKIND	ARC	O GARCIA	NCA 2-764	1793
31	SAN FRAN STATE UNIV	J A KAYE	HQ	P HAMILL	NAGW 3525	1809
31	SAN JOSE STATE UNIV	J B POLLACK	ARC	A F BRIDGER	NCA 2-740	1821
31	SAN JOSE STATE UNIV	B TOON	ARC	P HAMILL	NCA 2-741	1822
31	SAN JOSE STATE UNIV	S HIPSKIND	ARC	J GOODMAN	NCA 2-744	1823
31	SAN JOSE STATE UNIV	J B POLLACK	ARC	A F BRIDGER	NCA 2-817	1829
31	SAN JOSE STATE UNIV	J VALENTIN	ARC	J BECKER	NCA 2-834	1830
31	SAN JOSE STATE UNIV	R L CHAN	ARC	J GOODMAN	NCC 2-168	1832
31	SAN JOSE STATE UNIV	K R CHAN	ARC	J GOODMAN	NCC 2-211	1834
31	SAN JOSE STATE UNIV	R E BACH	ARC	P F LESTER	NCC 2-315	1835
31	SAN JOSE STATE UNIV	L E LASHER	ARC	P LESTER	NCC 2-471	1839
31	SAN JOSE STATE UNIV	O B TOON	ARC	P HAMILL	NCC 2-665	1841
31	SAN JOSE STATE UNIV	R B CHATFIELD	ARC	P HAMILL	NCC 2-756	1845
31	SAN JOSE STATE UNIV	R M HABERLE	ARC	A BRIDGER	NCC 2-5076	1854
31	SAN JOSE STATE UNIV	R M HABERLE	ARC	A BRIDGER	NCC 2-5077	1855
31	SAN JOSE STATE UNIV	R HABERLE	ARC	A BRIDGER	NCC 2-5078	1856
31	SAN JOSE STATE UNIV	R E YOUNG	ARC	A BRIDGER	NCC 2-5092	1857
31	SAN JOSE STATE UNIV	R E WONG	ARC	A BRIDGER	NCC 2-5093	1858
31	SAN JOSE STATE UNIV	R M HABERLE	ARC	A BRIDGER	NCC 2-5094	1859
31	SAN JOSE STATE UNIV	J BERGSTRAHL	HQ	G L TYLER	NAGW 3443	1937
31	STANFORD UNIVERSITY	P SELLERS	GSFC	H MOONEY	NAS 5-31726	1945
31	STANFORD UNIVERSITY	R CHATFIELD	ARC	J OLIGER	NCA 2-810	1969
31	STANFORD UNIVERSITY	R CHATFIELD	ARC	L HILDEMAN	NCC 2-5023	1989
31	STANFORD UNIVERSITY	G LEVY	HQ	P RICHARDS	NAGW 2121	2121
31	UNIV CALIF-BERKELEY	L CHRISTENSEN	GSFC	F MOZER	NAS 5-30801	2170
31	UNIV CALIF-BERKELEY	T ONEIL	MSFC	S BOWYER	NAS 8-32577	2173
31	UNIV CALIF-BERKELEY	D E WICKLAND	HQ	J HARTE	NGT 00-030-212	2204
31	UNIV CALIF-BERKELEY	J W KAUFMAN	MSFC	T R NATHAN	NAG 8-871	2250
31	UNIV CALIF-DAVIS	J KAUFMAN	MSFC	T R NATHAN	NAG 8-1054	2251
31	UNIV CALIF-DAVIS	J T BERGSTRALH	HQ	W M JACKSON	NAGW 903	2253
31	UNIV CALIF-DAVIS	P SELLERS	GSFC	S USTIN	NAS 5-31359	2258
31	UNIV CALIF-DAVIS	G ASRAR	HQ	E C CORDERO	NGT 00-030-153	2297
31	UNIV CALIF-DAVIS	G ASRAR	HQ	B C WEARE	NGT 00-030-200	2299
31	UNIV CALIF-DAVIS	J M HOELL	LARC	F S ROWLAND	NAG 1-783	2304
31	UNIV CALIF-IRVINE	W L GROSE	LARC	M J PRATHER	NAG 1-1515	2305
31	UNIV CALIF-IRVINE	J W DREWRY	LARC	F S ROWLAND	NAG 1-1533	2306
31	UNIV CALIF-IRVINE	J W DREWRY	LARC	F S ROWLAND	NAG 1-1644	2308
31	UNIV CALIF-IRVINE	R W STEWART	GSFC	M J PRATHER	NAG 5-2724	2319
31	UNIV CALIF-IRVINE	M J KURYLO	HQ	F S ROWLAND	NAGW 452	2321
31	UNIV CALIF-IRVINE	J A KAYE	HQ	M J PRATHER	NAGW 3163	2329
31	UNIV CALIF-IRVINE	E P CONDON	ARC	F S ROWLAND	NCC 2-750	2332

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	UNIV CALIF-IRVINE	G ASRAR	HQ	D W TOOHEY	NGT 00-030-161	2334
31	UNIV CALIF-IRVINE	G ASRAR	HQ	R J CICERONE	NGT 00-030-163	2335
31	UNIV CALIF-L ANGELES	L R POOLE	LERC	B V SANKAR	NAG 1-1126	2343
31	UNIV CALIF-L ANGELES	R F PUESCHEL	ARC	J K LEW	NAG 2-805	2353
31	UNIV CALIF-L ANGELES	J PFAENDTNER	GSFC	M GHIL	NAG 5-713	2365
31	UNIV CALIF-L ANGELES	M SUAREZ	GSFC	A ARAKAWA	NAG 5-789	2366
31	UNIV CALIF-L ANGELES	J R FISCHER	GSFC	C R MECHOSO	NAG 5-2224	2384
31	UNIV CALIF-L ANGELES	M SUAREZ	GSFC	A ARAKAWA	NAG 5-2591	2387
31	UNIV CALIF-L ANGELES	F SIX	MSFC	R L MCPHERRON	NAG 8-247	2389
31	UNIV CALIF-L ANGELES	J T BERGSTRALH	HQ	R M THORNE	NAGW 87	2394
31	UNIV CALIF-L ANGELES	R D MCPETERS	HQ	C R MECHOSO	NAGW 1021	2397
31	UNIV CALIF-L ANGELES	J T BERGSTRALH	HQ	J G LUHMAN	NAGW 3426	2438
31	UNIV CALIF-L ANGELES	J T BERGSTRALH	HQ	C T RUSSELL	NAGW 3492	2443
31	UNIV CALIF-L ANGELES	J T BERGSTRALH	HQ	R J STRANGWAY	NAGW 3497	2444
31	UNIV CALIF-L ANGELES	J T BERGSTRALH	HQ	K K KHURANA	NAGW 3661	2448
31	UNIV CALIF-L ANGELES	J A KAYE	HQ	R TURCO	NAGW 3671	2449
31	UNIV CALIF-L ANGELES	M KICZA	HQ	D PAIGE	NAGW 3857	2452
31	UNIV CALIF-L ANGELES	J BERGSTRALH	HQ	J LUHMANN	NAGW 4063	2458
31	UNIV CALIF-L ANGELES	M MEYER	HQ	D A PAIGE	NAGW 4115	2460
31	UNIV CALIF-L ANGELES	G L MADDREA	LARC	R P TURCO	NAS 1-19956	2463
31	UNIV CALIF-L ANGELES	D M BUTLER	HQ	A TABAZADEH	NGT 00-030-079	2476
31	UNIV CALIF-SAN DIEGO	P PILEWSKIE	ARC	F P VALERO	NAG 2-934	2505
31	UNIV CALIF-SAN DIEGO	M SUAREZ	GSFC	R C SOMERVILLE	NAG 5-236	2509
31	UNIV CALIF-SAN DIEGO	G S LAGERLOEF	HQ	T P BARNETT	NAGW 1952	2547
31	UNIV CALIF-SAN DIEGO	M J KURYLO	HQ	R F WEISS	NAGW 2034	2550
31	UNIV CALIF-SAN DIEGO	A C JANETOS	HQ	M WAHLEN	NAGW 2542	2555
31	UNIV CALIF-SAN DIEGO	A KAYE	HQ	D LUBIN	NAGW 3896	2582
31	UNIV CALIF-SAN DIEGO	B TOON	ARC	V RAMANTHAN	NCA 2-791	2595
31	UNIV CALIF-SAN DIEGO	D L WESTPHAL	ARC	P J FLATAU	NCC 2-820	2600
31	UNIV CALIF-S BARBARA	J C DODGE	HQ	C GAUTIER	NAGW 2460	2643
31	UNIV CALIF-S BARBARA	R A SCHIFFER	HQ	C H GAUTIER	NAGW 2737	2646
31	UNIV CALIF-S BARBARA	J C DODGE	HQ	C GAUTIER	NAGW 3180	2649
31	UNIV CALIF-S BARBARA	T BRAKE	GSFC	J M MELACK	NAS 5-31713	2659
31	UNIV OF SOUTHERN CAL	G ASRAR	HQ	J A HICKE	NGT 00-030-138	2664
31	UNIV OF SOUTHERN CAL	K FOX	HQ	D L JUDGE	NAGW 163	2725
31	UNIV OF SOUTHERN CAL	W J WAGNER	HQ	D L JUDGE	NAGW 3063	2735
31	UNIV OF SOUTHERN CAL	J BERGSTRALH	HQ	D SHEMANSKY	NAGW 3905	2743
31	COLORADO STATE UNIV	T OWENS	LARC	D A RANDALL	NAG 1-1137	2765
31	COLORADO STATE UNIV	T OWENS	LARC	S K COX	NAG 1-1146	2766
31	COLORADO STATE UNIV	B A WIELICKI	LARC	D A RANDALL	NAG 1-1266	2767
31	COLORADO STATE UNIV	E P CONDON	ARC	S M KREIDENWEISS	NAG 2-924	2769
31	COLORADO STATE UNIV	W WISCOMBE	GSFC	D RANDALL	NAG 5-1058	2773
31	COLORADO STATE UNIV	R ADLER	GSFC	G L STEPHENS	NAG 5-1592	2774
31	COLORADO STATE UNIV	D STARR	GSFC	D RANDALL	NAG 5-1653	2775
31	COLORADO STATE UNIV	O THIELE	GSFC	S A RUTLEDGE	NAG 5-2692	2778
31	COLORADO STATE UNIV	R E HOOD	MSFC	V N BRINGI	NAG 8-890	2779
31	COLORADO STATE UNIV	F R ROBERTSON	MSFC	G L STEPHENS	NAG 8-981	2780
31	COLORADO STATE UNIV	J C DODGE	HQ	T H HAAR	NAGW 2700	2786
31	COLORADO STATE UNIV	J C DODGE	HQ	G C CAMPBELL	NAGW 4122	2788
31	COLORADO STATE UNIV	G L MADDREA	LARC	D RANDALL	NAS 1-19951	2789
31	COLORADO STATE UNIV	P SELLERS	GSFC	D RANDALL	NAS 5-31730	2791
31	COLORADO STATE UNIV	D M BUTLER	HQ	T J GREENWALD	NGT 00-030-046	2794
31	COLORADO STATE UNIV	D M BUTLER	HQ	C W LANDSEA	NGT 00-030-064	2795
31	COLORADO STATE UNIV	G ASRAR	HQ	J A KNAFF	NGT 00-030-147	2799
31	UNIV COLORADO-BOLDR	T OWENS	LARC	J LONDON	NAG 1-998	2809
31	UNIV COLORADO-BOLDR	W L GROSE	LARC	M L SALBY	NAG 1-1355	2812
31	UNIV COLORADO-BOLDR	J G WELLS	LARC	D C FRITTS	NAG 1-1440	2815
31	UNIV COLORADO-BOLDR	E CONDON	ARC	M A TOLBERT	NAG 2-760	2825
31	UNIV COLORADO-BOLDR	E CONDON	ARC	P J SHERIDAN	NAG 2-761	2826
31	UNIV COLORADO-BOLDR	S H MELFI	GSFC	R L GROSSMAN	NAG 5-1115	2850

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	UNIV COLORADO-BOLDR	J R HERMAN	GSFC	D A RUSCH	NAG 5-1475	2853
31	UNIV COLORADO-BOLDR	B CAMPBELL	GSFC	D C FRITTS	NAG 5-2550	2900
31	UNIV COLORADO-BOLDR	B CAMPBELL	GSFC	J M FORBES	NAG 5-2551	2901
31	UNIV COLORADO-BOLDR	J R HERMAN	GSFC	D RUSCH	NAG 5-2579	2904
31	UNIV COLORADO-BOLDR	W CHAO	GSFC	P J WEBSTER	NAG 5-2671	2914
31	UNIV COLORADO-BOLDR	J A SLAVIN	GSFC	D N BAKER	NAG 5-2681	2915
31	UNIV COLORADO-BOLDR	H J CHRISTIAN	MSFC	G R SCHARFEN	NAG 8-882	2922
31	UNIV COLORADO-BOLDR	J OWEN	MSFC	G C CLAYTON	NAG 8-1048	2925
31	UNIV COLORADO-BOLDR	K FOX	HQ	L ESPOSITO	NAGW 389	2932
31	UNIV COLORADO-BOLDR	R D MCPETERS	HQ	M L SALBY	NAGW 772	2936
31	UNIV COLORADO-BOLDR	J C DODGE	HQ	W EMERY	NAGW 1960	2952
31	UNIV COLORADO-BOLDR	R D MCPETERS	HQ	R T CLANCY	NAGW 2130	2956
31	UNIV COLORADO-BOLDR	J A KAYE	HQ	D W RUSCH	NAGW 2744	2974
31	UNIV COLORADO-BOLDR	J C DODGE	HQ	M L SALBY	NAGW 2979	2985
31	UNIV COLORADO-BOLDR	J C DODGE	HQ	M L SALBY	NAGW 3047	2993
31	UNIV COLORADO-BOLDR	J T BERGSTRALH	HQ	D H GRINSPOON	NAGW 3482	3004
31	UNIV COLORADO-BOLDR	J A KAYE	HQ	M L SALBY	NAGW 3485	3005
31	UNIV COLORADO-BOLDR	J T BERGSTRALH	HQ	L W ESPOSITO	NAGW 3609	3011
31	UNIV COLORADO-BOLDR	J C DODGE	HQ	W EMERY	NAGW 3919	3019
31	UNIV COLORADO-BOLDR	J BERGSTRALH	HQ	B JAKOSKY	NAGW 3995	3021
31	UNIV COLORADO-BOLDR	J C DODGE	HQ	J A CURRY	NAGW 3997	3022
31	UNIV COLORADO-BOLDR	J C DODGE	HQ	S AVERY	NAGW 4146	3026
31	UNIV COLORADO-BOLDR	C REBER	GSFC	J LONDON	NAS 5-27263	3027
31	UNIV COLORADO-BOLDR	N PITERSKI	GSFC	G ROTTMAN	NAS 5-27750	3028
31	UNIV COLORADO-BOLDR	H BLODGET	GSFC	A GOETZ	NAS 5-31711	3030
31	UNIV COLORADO-BOLDR	T BRAKE	GSFC	C WESSMAN	NAS 5-31715	3031
31	UNIV COLORADO-BOLDR	B CAMPBELL	GSFC	D W RUSCH	NAS 5-32568	3034
31	UNIV COLORADO-BOLDR	J B POLLACK	ARC	D H GRINSPOON	NCA 2-823	3042
31	UNIV COLORADO-BOLDR	J M ZAWODNY	LARC	D W RUSCH	NCC 1-143	3043
31	UNIV COLORADO-BOLDR	D M BUTLER	HQ	L CHEN	NGT 00-030-060	3053
31	UNIV COLORADO-BOLDR	G ASRAR	HQ	T P HARTSELL	NGT 00-030-102	3056
31	UNIV COLORADO-BOLDR	G ASRAR	HQ	M SALBY	NGT 00-030-187	3062
31	UNIV COLORADO-BOLDR	G ASRAR	HQ	D J HOFMANN	NGT 00-030-205	3063
31	UNIV COLORADO-BOLDR	G ASRAR	HQ	A R RAVISHANKARA	NGT 00-030-206	3064
31	UNIV COLORADO-BOLDR	F C OWENS	HQ	W BLUMEN	NGT 00-050-518	3069
31	UNIV COLORADO-BOLDR	J ALEXANDER	HQ	J T STOCKE	NGT 00-050-909	3083
31	UNIV COLORADO-BOLDR	A NOVOTNY	HQ	M A TOLBERT	NGT 00-051-224	3100
31	UNIV OF DENVER	J G WELLS	LARC	D G MURCRAY	NAG 1-1336	3119
31	UNIV OF DENVER	E P CONDON	ARC	D G MURCRAY	NAG 2-351	3121
31	UNIV OF DENVER	S S WEGENER	ARC	J C WILSON	NAG 2-458	3122
31	UNIV OF DENVER	C P RINSLAND	LARC	A GOLDMAN	NCC 1-48	3129
31	UNIV OF DENVER	E P CONDON	ARC	J C WILSON	NCC 2-776	3130
31	UNIV OF DENVER	E CONDON	ARC	J C WILSON	NCC 2-782	3131
31	UNIV OF DENVER	O W THIELE	GSFC	B SALTZMAN	NAG 5-2316	3160
31	YALE UNIVERSITY	G ASRAR	HQ	E P SALATHE	NGT 00-030-010	3167
31	YALE UNIVERSITY	J S THEON	HQ	J WU	NAGW 2981	3196
31	UNIV OF DELAWARE	S R BREON	GSFC	A N THORPE	NAG 5-1017	3239
31	HOWARD UNIVERSITY	J T BERGSTRALH	HQ	H OKABE	NAGW 785	3242
31	HOWARD UNIVERSITY	H L KYLE	GSFC	H L DHURIA	NAG 5-2345	3273
31	UNIV DIST COLUMBIA	F SIX	MSFC	L ERICKSON	NCC 8-26	3283
31	EMBRY-RIDDLE AERO U	O B TOON	ARC	J A JOHNSON III, (DR	NAG 2-921	3293
31	FLORIDA A&M UNIV	J J MARGITAN	HQ	C R BURNETT	NAGW 989	3310
31	FLORIDA ATLANTIC U	O J THIELE	GSFC	W L JONES	NAS 5-32364	3322
31	FLORIDA INST OF TECH	J FISHMAN	LARC	T N KRISHNAMURTI	NAG 1-1312	3328
31	FLORIDA STATE UNIV	M HELFAND	GSFC	R L PFEFFER	NAG 5-815	3333
31	FLORIDA STATE UNIV	D SHORT	GSFC	S E NICHOLSON	NAG 5-1587	3334
31	FLORIDA STATE UNIV	W LAU	GSFC	T N KRISHNAMURTI	NAG 5-1595	3335
31	FLORIDA STATE UNIV	A NEGRI	GSFC	E A SMITH	NAG 5-1602	3336
31	FLORIDA STATE UNIV	J R BATES	GSFC	I M NAVON	NAG 5-1660	3337
31	FLORIDA STATE UNIV	G M HEYMSFIELD	GSFC	P S RAY	NAG 5-1869	3338

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	FLORIDA STATE UNIV	W K LAU	GSFC	H WENG	NAG 5-2468	3341
31	FLORIDA STATE UNIV	A NEGRI	GSFC	E SMITH	NAG 5-2672	3342
31	FLORIDA STATE UNIV	A GUILLORY	MSFC	H E FUELBERG	NAG 8-911	3344
31	FLORIDA STATE UNIV	D FITZJARRALD	MSFC	T N KRISHNAMURTI	NAG 8-914	3345
31	FLORIDA STATE UNIV	S J GOODMAN	MSFC	E A SMITH	NAG 8-916	3346
31	FLORIDA STATE UNIV	G J JEDLOVEC	MSFC	H E FUELBERG	NAG 8-942	3347
31	FLORIDA STATE UNIV	J C DODGE	HQ	E A SMITH	NAGW 991	3349
31	FLORIDA STATE UNIV	D ADAMEC	HQ	W K DEWAR	NAGW 3087	3352
31	FLORIDA STATE UNIV	R E MURPHY	HQ	S E NICHOLSON	NAGW 3101	3353
31	FLORIDA STATE UNIV	R E MURPHY	HQ	E A SMITH	NAGW 3109	3354
31	FLORIDA STATE UNIV	J C DODGE	HQ	E A SMITH	NAGW 3970	3358
31	FLORIDA STATE UNIV	G ASRAR	HQ	H E FUELBERG	NGT 00-030-214	3362
31	FLORIDA STATE UNIV	B MILLER	KSC	H E FUELBERG	NGT 00-050-983	3364
31	FLORIDA STATE UNIV	F C OWENS	HQ	S E NICHOLSON	NGT 00-070-062	3365
31	FLORIDA STATE UNIV	G SOFFEN	GSFC	S NICHOLSON	NGT 00-070-273	3367
31	UNIV OF FLORIDA	L E LASHER	ARC	M A UMAN	NAG 2-667	3402
31	UNIV OF MIAMI	J W DREWRY	LARC	J M PROSPERO	NAG 1-1229	3455
31	UNIV OF MIAMI	H OSEROFF	GSFC	R EVANS	NAS 5-31362	3472
31	UNIV OF MIAMI	H OSEROFF	GSFC	H GORDON	NAS 5-31363	3473
31	UNIV OF MIAMI	C MCLAIN	GSFC	H GORDAN	NAS 5-31734	3474
31	UNIV OF SO FLORIDA	N P BARNES	LARC	D K KILLINGER	NAG 1-1104	3480
31	UNIV OF SO FLORIDA	H OSEROFF	GSFC	K R CARDER	NAS 5-31716	3494
31	GEORGIA INST OF TECH	E V BROWELL	LARC	J D BRADSHAW	NAG 1-1213	3518
31	GEORGIA INST OF TECH	E V BROWELL	LARC	J BRADSHAW	NAG 1-1415	3522
31	GEORGIA INST OF TECH	J FISHMAN	LARC	D D DAVIS	NAG 1-1438	3524
31	GEORGIA INST OF TECH	W L GROSE	LARC	S MENON	NAG 1-1631	3530
31	GEORGIA INST OF TECH	R F ADLER	GSFC	A J GASIEWSKI	NAG 5-1490	3550
31	GEORGIA INST OF TECH	J T BERGSTRALH	HQ	P G STEFFES	NAGW 533	3560
31	GEORGIA INST OF TECH	M J KURYLO	HQ	P H WINE	NAGW 1001	3561
31	GEORGIA INST OF TECH	J A KAYE	HQ	F L EISELE	NAGW 3767	3565
31	GEORGIA INST OF TECH	J A KAYE	HQ	P KASIBHATLA	NAGW 3770	3566
31	GEORGIA INST OF TECH	G L MADDREA	LARC	D M CUNNOLD	NAS 1-18938	3571
31	GEORGIA INST OF TECH	G L MADDREA	LARC	D M CUNNOLD	NAS 1-19954	3573
31	GEORGIA INST OF TECH	C REBER	GSFC	D CUNNOLD	NAS 5-27264	3575
31	GEORGIA INST OF TECH	J M HOELL	LARC	D D DAVIS	NCC 1-148	3580
31	GEORGIA INST OF TECH	F SIX	MSFC	R G ROPER	NGT 00-050-864	3589
31	UNIV OF HAWAII-MANOA	L S WALTER	GSFC	S SELF	NAG 5-1839	3662
31	UNIV OF HAWAII-MANOA	J ROTHERMEL	MSFC	A D CLARKE	NAG 8-848	3678
31	UNIV OF HAWAII-MANOA	M BALTUCK	HQ	S SELF	NAGW 3721	3727
31	UNIV OF HAWAII-MANOA	J T SUTTLES	HQ	A CLARKE	NAGW 3766	3728
31	UNIV OF HAWAII-MANOA	J C DODGE	HQ	T N NELSON	NAGW 3918	3734
31	UNIV OF HAWAII-MANOA	J R RICHARDS	GSFC	T B OWEN	NAS 5-30951	3742
31	UNIV OF IDAHO	J B POLLACK	ARC	D H ATKINSON	NCA 2-795	3761
31	UNIV OF IDAHO	J B POLLACK	ARC	D H ATKINSON	NCC 2-848	3762
31	CHICAGO STATE UNIV	G ASRAR	HQ	B J SODEN	NGT 00-030-011	3767
31	UNIV OF CHICAGO	E HILSENATH	GSFC	J E FREDERICK	NAG 5-873	3840
31	UNIV OF CHICAGO	A L KRUEGER	GSFC	J E FREDERICK	NAG 5-1986	3846
31	UNIV OF CHICAGO	S J GOODMAN	MSFC	T J FUJITA	NAG 8-886	3856
31	UNIV OF CHICAGO	S J GOODMAN	MSFC	T T FAJITA	NAG 8-1070	3857
31	UNIV OF CHICAGO	H C BRINTON	HQ	A J TUZZOLINO	NAGW 3078	3884
31	UNIV OF CHICAGO	J A KAYE	HQ	G C TIAO	NAGW 3114	3885
31	UNIV OF CHICAGO	J BOYCE	HQ	E OLSEN	NAGW 3569	3893
31	UNIV OF CHICAGO	E M SULLIVAN	LARC	J E FREDERICK	NAS 1-18239	3897
31	UNIV ILLINOIS-URBANA	J G WELLS	LARC	C S GARDNER	NAG 1-1344	3931
31	UNIV ILLINOIS-URBANA	L R POOLE	LARC	G C PAPEN	NAG 1-1639	3935
31	UNIV ILLINOIS-URBANA	L WALTER	GSFC	P HANDLER	NAG 5-1896	3961
31	UNIV ILLINOIS-URBANA	J KAYE	HQ	J WALSH	NAGW 992	3974
31	UNIV ILLINOIS-URBANA	R D MCPETERS	HQ	W A ROBINSON	NAGW 1729	3978
31	UNIV ILLINOIS-URBANA	G L MADDREA	LARC	C S GARDNER	NAS 1-19950	3985
31	UNIV ILLINOIS-URBANA	G L MADDREA	LARC	N SONG	NAS 1-19957	3986

NASA'S UNIVERSITY PROGRAM

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	PURDUE UNIVERSITY	R S FRASER	GSFC	HARSHVARDHAN	NAG 5-1125	4066
31	PURDUE UNIVERSITY	J W KAUFMAN	MSFC	D G VINCENT	NAG 8-836	4070
31	PURDUE UNIVERSITY	J W KAUFMAN	MSFC	P J SMITH	NAG 8-915	4071
31	PURDUE UNIVERSITY	W M LAPENTA	MSFC	G W PETTY	NAG 8-918	4072
31	PURDUE UNIVERSITY	J W KAUFMAN	MSFC	D G VINCENT	NAG 8-1031	4074
31	PURDUE UNIVERSITY	J C DODGE	HQ	G W PETTY	NAGW 2984	4079
31	PURDUE UNIVERSITY	J C DODGE	HQ	HARSHVARDHAN	NAGW 3150	4081
31	PURDUE UNIVERSITY	J C DODGE	HQ	G W PETTY	NAGW 3944	4087
31	PURDUE UNIVERSITY	H W BLODGET	GSFC	D A LANDGREBE	NAS 5-31712	4088
31	PURDUE UNIVERSITY	G LESANE	HQ	G W PETTY	NGT 00-051-077	4100
31	IOWA STATE UNIV	J W PFAENDTNER	GSFC	T C CHEN	NAG 5-355	4150
31	IOWA STATE UNIV	A J KRUEGER	GSFC	J L STANFORD	NAG 5-1519	4161
31	IOWA STATE UNIV	J A KAYE	HQ	J L STANFORD	NAGW 2582	4169
31	IOWA STATE UNIV	J C DODGE	HQ	W J GUTOWSKI	NAGW 2993	4170
31	IOWA STATE UNIV	J ALEXANDER	HQ	T C CHEN	NGT 00-050-757	4176
31	UNIV OF IOWA	O W THIELE	GSFC	W F KRAJEWSKI	NAG 5-2084	4187
31	UNIV OF IOWA	J A KAYE	HQ	G R CARMICHAEL	NAGW 2428	4188
31	UNIV OF IOWA	J L CHRISTENSEN	GSFC	D GURNETT	NAS 5-30730	4227
31	UNIV OF IOWA	G ASRAR	HQ	Y SUNWOO	NGT 00-030-030	4229
31	UNIV OF IOWA	G ASRAR	HQ	W F KRAJEWSKI	NGT 00-030-192	4231
31	UNIV OF IOWA	G ASRAR	HQ	T F SMITH	NGT 00-030-218	4232
31	UNIV OF IOWA	F SIX	MSFC	T A HOCKEY	NAG 8-265	4237
31	UNIV OF NRTHN IOWA	G M HEYMSFIELD	GSFC		NAG 5-1811	4240
31	UNIV OF KANSAS	D E FITZJARRALD	MSFC	R K MOORE	NAG 8-958	4252
31	UNIV OF KANSAS	G ASRAR	HQ	S P GOGINENI	NGT 00-030-202	4271
31	UNIV OF KANSAS	JOYCE	SSC	T WILLIAMS	NAG13-24	4277
31	UNIV SOUTHWESTERN LA	A ARKING	GSFC	D F STROBEL	NAG 5-1476	4405
31	JOHNS HOPKINS UNIV	K M LAU	GSFC	A ARKING	NAG 5-2039	4421
31	JOHNS HOPKINS UNIV	J T BERGSTRAHL	HQ	D F STROBEL	NAGW 648	4445
31	JOHNS HOPKINS UNIV	G C CLAYTON	HQ	R C HENRY	NAGW 1890	4448
31	JOHNS HOPKINS UNIV	R D MCPETERS	HQ	D F STROBEL	NAGW 2148	4450
31	JOHNS HOPKINS UNIV	W C PATZERT	HQ	R C BEAL	NAGW 2719	4459
31	JOHNS HOPKINS UNIV	M J KURYLO	HQ	D E ANDERSON	NAGW 3125	4468
31	JOHNS HOPKINS UNIV	H BLODGET	GSFC	J SALISBURY	NAS 5-31373	4484
31	UNIV MARYLAND-BALT	J SUSSKIND	GSFC	L L STROW	NAG 5-1583	4515
31	UNIV MARYLAND-COL PK	J R BATES	GSFC	F E BAER	NAG 5-867	4552
31	UNIV MARYLAND-COL PK	M D CHOU	GSFC	R T PINKER	NAG 5-914	4553
31	UNIV MARYLAND-COL PK	J R HERMAN	GSFC	R D HUDSON	NAG 5-1696	4589
31	UNIV MARYLAND-COL PK	G K SCHWEMMER	GSFC	T D WILKERSON	NAG 5-1782	4571
31	UNIV MARYLAND-COL PK	L S WALTER	GSFC	A ROBUCK	NAG 5-1835	4573
31	UNIV MARYLAND-COL PK	R K KAKAR	HQ	J SHUKLA	NAGW 558	4645
31	UNIV MARYLAND-COL PK	W HUNTRESS JR	HQ	R G ELLINGSON	NAGW 1471	4620
31	UNIV MARYLAND-COL PK	M MELLOTT	HQ	J F DRAKE	NAGW 1661	4622
31	UNIV MARYLAND-COL PK	K H BERGMAN	HQ	D STRAUS	NAGW 2664	4638
31	UNIV MARYLAND-COL PK	M BALTUCK	HQ	G BLUTH	NAGW 3729	4665
31	UNIV MARYLAND-COL PK	E R KREINS	GSFC	F BAER	NAS 5-29163	4676
31	UNIV MARYLAND-COL PK	T VON ROSENVINGE	GSFC	G M MASON	NAS 5-30927	4678
31	UNIV MARYLAND-COL PK	L CHRISTENSEN	GSFC	F IPAVICH	NAS 5-31166	4679
31	UNIV MARYLAND-COL PK	P SELLERS	GSFC	C JUSTICE	NAS 5-31732	4681
31	UNIV MARYLAND-COL PK	E M MIDDLETON	GSFC	S N GOWARD	NCC 5-26	4689
31	UNIV MARYLAND-COL PK	E R KREINS	GSFC	F BAER	NCC 5-39	4691
31	UNIV MARYLAND-COL PK	J SUSSKIND	GSFC	H MOTTELER	NCC 5-57	4731
31	U OF MD BALTIMOR CTY	C L JOHNSON	MSFC	S GHAKRABARTI	NAG 8-1053	4752
31	BOSTON UNIVERSITY	H OSEROFF	GSFC	W STRAHLER	NAS 5-31369	4766
31	BOSTON UNIVERSITY	D L REASONER	MSFC	M MENDILLO	NAS 8-36324	4767
31	BRIDGEWATER ST COL	F SIX	MSFC	J SULONOWSKI	NAG 8-1011	4773
31	HARVARD UNIVERSITY	L R POOLE	LARC	J G ANDERSON	NAG 1-1305	4778
31	HARVARD UNIVERSITY	J M HOELL	LARC	D J JACOB	NAG 1-1421	4780
31	HARVARD UNIVERSITY	L R POOLE	LARC	J G ANDERSON	NAG 1-1609	4781
31	HARVARD UNIVERSITY	L R POOLE	LARC	J G ANDERSON	NAG 1-1817	4782

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	HARVARD UNIVERSITY	E P CONDON	ARC	S C WOFSY	NAG 2-731	4785
31	HARVARD UNIVERSITY	P SELLERS	GSFC	S WOFSY	NAG 5-1794	4790
31	HARVARD UNIVERSITY	R W STEWART	GSFC	D J JACOB	NAG 5-2600	4799
31	HARVARD UNIVERSITY	R D MCPETERS	HQ	S C WOFSY	NAGW 1230	4804
31	HARVARD UNIVERSITY	G C CLAYTON	HQ	W H PARKINSON	NAGW 1596	4805
31	HARVARD UNIVERSITY	J A KAYE	HQ	M B MCELROY	NAGW 2632	4811
31	HARVARD UNIVERSITY	G L MADDREA	LARC	S C WOFSY	NAS 1-19955	4823
31	HARVARD UNIVERSITY	E P CONDON	ARC	J G ANDERSON	NCC 2-693	4825
31	HARVARD UNIVERSITY	E P CONDON	ARC	S C WOFSY	NCC 2-694	4826
31	HARVARD UNIVERSITY	E CONDON	ARC	S C WOFSY	NCC 2-786	4827
31	HARVARD UNIVERSITY	E CONDON	ARC	J G ANDERSON	NCC 2-790	4828
31	HARVARD UNIVERSITY	G ASRAR	HQ	T M DELSOLE	NGT 00-030-027	4830
31	HARVARD UNIVERSITY	G ASRAR	HQ	S A LLOYD	NGT 00-030-031	4831
31	HARVARD UNIVERSITY	D M BUTLER	HQ	L M AVALONE	NGT 00-030-080	4834
31	HARVARD UNIVERSITY	D M BUTLER	HQ	A E DESSLER	NGT 00-030-082	4835
31	HARVARD UNIVERSITY	G ASRAR	HQ	D JACOB	NGT 00-030-172	4836
31	HARVARD UNIVERSITY	G ASRAR	HQ	D JACOB	NGT 00-030-184	4838
31	MASS INST OF TECH	J M HOELL	LARC	R E NEWELL	NAG 1-1252	4862
31	MASS INST OF TECH	R E TURNER	LARC	R A PLUMB	NAG 1-1360	4864
31	MASS INST OF TECH	E CONDON	ARC	M J MOLINA	NAG 2-632	4877
31	MASS INST OF TECH	J C SHIUE	GSFC	D H STAELIN	NAG 5-10	4911
31	MASS INST OF TECH	A D GENIO	GSFC	P S EAGLESON	NAG 5-743	4913
31	MASS INST OF TECH	D RIND	GSFC	P H STONE	NAG 5-1328	4916
31	MASS INST OF TECH	D SHORT	GSFC	R L BRAS	NAG 5-1615	4918
31	MASS INST OF TECH	B G BILLS	GSFC	P MOLNAR	NAG 5-1947	4930
31	MASS INST OF TECH	D G DUFFY	GSFC	P H STONE	NAG 5-2490	4940
31	MASS INST OF TECH	J SHIUE	GSFC	D H STAELIN	NAG 5-2545	4945
31	MASS INST OF TECH	R W STEWART	GSFC	R A PLUMB	NAG 5-2582	4946
31	MASS INST OF TECH	J V VARGAS	MSFC	G W CLARK	NAG 8-185	4951
31	MASS INST OF TECH	H J CHRISTIAN	MSFC	E R WILLIAMS	NAG 8-935	4956
31	MASS INST OF TECH	J A KAYE	HQ	R G PRINN	NAGW 474	4973
31	MASS INST OF TECH	R K KAKAR	HQ	R S LINDZEN	NAGW 525	4974
31	MASS INST OF TECH	R D MCPETERS	HQ	R G PRINN	NAGW 732	4976
31	MASS INST OF TECH	M J KURYLO	HQ	J I STEINFELD	NAGW 1667	4987
31	MASS INST OF TECH	R D MCPETERS	HQ	R A PLUMB	NAGW 1727	4988
31	MASS INST OF TECH	M J KURYLO	HQ	M J MOLINA	NAGW 2190	5000
31	MASS INST OF TECH	D ADAMEO	HQ	P MALANOTTE-RIZZO	NAGW 2711	5009
31	MASS INST OF TECH	R E MURPHY	HQ	D ENTEKHABI	NAGW 3100	5018
31	MASS INST OF TECH	D DUFFY	GSFC	P H STONE	NGR22-9727	5065
31	MASS INST OF TECH	G ASRAR	HQ	R ZHANG	NGT 00-030-036	5067
31	UNIV OF MASS-LOWELL	J G WELLS	LARC	R R GAMACHE	NAG 1-1261	5101
31	UNIV OF MASS-AMHERST	B J CONNOR	LARC	A D PARRISH	NAG 1-1022	5105
31	UNIV OF MASS-AMHERST	R H THOMAS	HQ	C T SWIFT	NAGW 3685	5122
31	MICHIGAN TECH UNIV	A J KRUEGER	GSFC	W I ROSE	NAG 5-2324	5184
31	MICHIGAN TECH UNIV	J BERGSTALH	HQ	A BORYSOW	NAGW 3390	5185
31	MICHIGAN TECH UNIV	M BALTUCK	HQ	G BLUTH	NAGW 4088	5186
31	UNIV MICH-ANN ARBOR	J G WELLS	LARC	T L KILLEEN	NAG 1-1315	5199
31	UNIV MICH-ANN ARBOR	J M HOELL	LARC	M A CARROLL	NAG 1-1465	5204
31	UNIV MICH-ANN ARBOR	G L GREGORY	LARC	M A CARROLL	NAG 1-1544	5208
31	UNIV MICH-ANN ARBOR	E CONDON	ARC	M A CARROLL	NAG 2-879	5214
31	UNIV MICH-ANN ARBOR	KOCZOR	MSFC	S R DRAYSON	NAG 8-858	5252
31	UNIV MICH-ANN ARBOR	R J KECZOR	MSFC	P B HAYS	NAG 8-919	5253
31	UNIV MICH-ANN ARBOR	H C BRINTON	HQ	A F NAGY	NAGW 631	5258
31	UNIV MICH-ANN ARBOR	R D MCPETERS	HQ	A K SMITH	NAGW 1744	5266
31	UNIV MICH-ANN ARBOR	G LEVY	HQ	D J HEYGI	NAGW 2124	5274
31	UNIV MICH-ANN ARBOR	G LEVY	HQ	D J HEYGI	NAGW 2125	5275
31	UNIV MICH-ANN ARBOR	M J KURYLO	HQ	J R BARKER	NAGW 2398	5281
31	UNIV MICH-ANN ARBOR	W L QUAIDE	HQ	A NAGY	NAGW 2533	5283
31	UNIV MICH-ANN ARBOR	J T BERGSTALH	HQ	L BRACE	NAGW 3579	5291
31	UNIV MICH-ANN ARBOR	J BERGSTALH	HQ	A NAGY	NAGW 3962	5294

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	UNIV MICH-ANN ARBOR	E M SULLIVAN	LARC	S R DRAYSON	NAS 1-18290	5298
31	UNIV MICH-ANN ARBOR	G HONEYCUTT	GSFC	P HAYS	NAS 5-27751	5302
31	UNIV MICH-ANN ARBOR	B NIEMANN	GSFC	S K ATREYA	NAS 5-30119	5303
31	UNIV MICH-ANN ARBOR	J R RICHARDS	GSFC	T M DONAHUE	NAS 5-30120	5304
31	UNIV MICH-ANN ARBOR	R L FROST	GSFC	G CARIGNAN	NAS 5-30943	5305
31	UNIV MICH-ANN ARBOR	R L FROST	GSFC	G CARIGNAN	NAS 5-30955	5306
31	UNIV MICH-ANN ARBOR	G COLON	GSFC	T L KILLEEN	NAS 5-32570	5308
31	UNIV MICH-ANN ARBOR	M F MALONE	MSFC	E G FONTHEIM	NAS 8-37108	5310
31	UNIV MICH-ANN ARBOR	D HOLLAND	HQ	T I GOMBOSI	NGT 00-051-335	5347
31	U MINN-MNPLS-ST PAUL	R F CAHALAN	GSFC	E FOUFOULA-GEORGIU	NAG 5-2108	5383
31	U MINN-MNPLS-ST PAUL	M J KURYLO	HQ	R W CARR	NAGW 800	5391
31	U MINN-MNPLS-ST PAUL	J A KAYE	HQ	P M MCMURRY	NAGW 3751	5407
31	U MINN-MNPLS-ST PAUL	D M BUTLER	HQ	J J MARTI	NGT 00-030-052	5417
31	U MINN-MNPLS-ST PAUL	A G BESWICK	LARC	K MAUERSBERGER	NSG-1431	5432
31	MISSISSIPPI STATE U	G J FISHMAN	MSFC	P LESTRADE	NAG 8-1022	5452
31	UNIV MO-COLUMBIA	A F HASLER	GSFC	X ZHUANG	NAG 5-2573	5489
31	UNIV MO-ROLLA	W R COFER	LARC	D E HAGEN	NAG 1-1632	5500
31	UNIV MO-ROLLA	E CONDON	ARC	P D WHITEFIELD	NAG 2-720	5501
31	WASHINGTON UNIVERSTY	I D BROWNE	JSC	C M HOHENBERG	NAG 9-7	5513
31	WASHINGTON UNIVERSTY	P D HAMMER	ARC	H SMITH	NCA 2-592	5547
31	UNIV OF MONTANA	G ASRAR	HQ	G N RICHARDS	NGT 00-030-169	5576
31	UNIV NEVADA-DRI	D S MCDUGAL	LARC	J G HUDSON	NAG 1-1113	5606
31	UNIV NEVADA-DRI	D S MCDUGAL	LARC	J HALLETT	NAG 1-1546	5607
31	UNIV NEVADA-DRI	R F PUESCHEL	ARC	J HALLETT	NAG 2-663	5608
31	UNIV NEVADA-DRI	E P CONDON	ARC	J HALLETT	NAG 2-923	5609
31	UNIV NEVADA-DRI	J T SUTTLES	HQ	J G HUDSON	NAGW 3753	5612
31	UNIV OF NEVADA-RENO	M J KURYLO	HQ	J HALLETT	NAGW 2572	5617
31	UNIV NEW HAMP-DURHAM	J LUVALL	MSFC	B ROCK	NAG 8-853	5668
31	UNIV NEW HAMP-DURHAM	J LOVALL	MSFC	B N ROCK	NAG 8-1044	5669
31	UNIV NEW HAMP-DURHAM	M J KURYLO	HQ	R C HARRIS	NAGW 1826	5674
31	UNIV NEW HAMP-DURHAM	M E MAIDEN	HQ	B M MOORE	NAGW 3185	5689
31	UNIV NEW HAMP-DURHAM	G W SACHSE	LARC	R C HARRIS	NCC 1-184	5706
31	UNIV NEW HAMP-DURHAM	S G TILFORD	HQ	E MOORE	NGT 00-080-009	5717
31	PRINCETON UNIVERSITY	J A KAYE	HQ	H ROBITZ	NAGW 3952	5769
31	RUTGERS ST U-PISCTWY	R H WARING	HQ	R AVISSAR	NAGW 2658	5807
31	NEW MEX INST MINING	J M ZAWODNY	LARC	R J THOMAS	NCC 1-142	5827
31	NEW MEX ST U-LAS CR	M E NEIN	MSFC	J D BURNS	NAG 8-986	5841
31	NEW MEX ST U-LAS CR	J B POLLACK	ARC	M S MARLEY	NCA 2-793	5858
31	CITY U OF NY CTY COL	J BERGARAN	HQ	K BECKER	NAGW 4118	5906
31	COLUMBIA UNIVERSITY	O W THIELE	GSFC	K TAKANO	NAG 5-1960	5942
31	COLUMBIA UNIVERSITY	M J KURYLO	HQ	W S BROECKER	NAGW 895	5958
31	COLUMBIA UNIVERSITY	M J KURYLO	HQ	W S BROECKER	NAGW 2111	5968
31	COLUMBIA UNIVERSITY	L D TRAVIS	GSFC	W S BROECKER	NCC 5-29	5986
31	COLUMBIA UNIVERSITY	R STOTHERS	GSFC	C K CHU	NCC 5-34	5987
31	COLUMBIA UNIVERSITY	L TRAVIS	GSFC	R L LEVENSON	NCC 5-36	5988
31	COLUMBIA UNIVERSITY	D PETEET	GSFC	L POLVANI	NCC 5-44	5990
31	COLUMBIA UNIVERSITY	V CANUTO	GSFC	R A LEVENSON	NCC 5-45	5991
31	CORNELL UNIVERSITY	B J CONRATH	GSFC	P J GIERASCH	NAG 5-813	6036
31	CORNELL UNIVERSITY	F G HALL	GSFC	W BRUTSAERT	NAG 5-1378	6038
31	CORNELL UNIVERSITY	J F STONE	MSFC	M KELLEY	NAS 8-36687	6092
31	CORNELL UNIVERSITY	G LESANE	HQ	K COOK	NGT 00-051-147	6111
31	NIAGARA UNIVERSITY	R BLAKESLEE	MSFC	W BOECK	NCC 8-55	6139
31	RENSSELAER POLY-NY	D FRAZIER	MSFC	M E GLIKSMAN	NAG 8-864	6164
31	ROCHESTER INST TECH	F SIX	MSFC	M L WINGSWORTH	NAG 8-1008	6196
31	ROCKEFELLER UNIV	P K BHARTIA	GSFC	L SIROVICH	NAG 5-2336	6198
31	ST JOHN FISHER COLL		MSFC	W LEWIS	NAG 8-1033	6200
31	STATE UNIV NY-ALBANY	M D CHOU	GSFC	W C WANG	NAG 5-1397	6201
31	STATE UNIV NY-ALBANY	R M ATLAS	GSFC	D KEYSER	NAG 5-1501	6202
31	STATE UNIV NY-ALBANY	S E KOCH	GSFC	D J KNIGHT	NAG 5-2205	6203
31	STATE UNIV NY-ALBANY	R W STEWART	GSFC	C W WALEK	NAG 5-2714	6205

NAŠA'S UNIVERSITY PROGRAM **APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING**

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	STATE UNIV NY-ALBANY	J A KAYE	HQ	W C WANG	NAGW 3155	6210
31	STATE UNIV NY-ALBANY	J A KAYE	HQ	M KRITZ	NAGW 3793	6212
31	STATE UNIV NY-ALBANY	J L COOPER	LARC	R D CESS	NAS 1-18155	6213
31	STATE UNIV NY-ALBANY	G L MADDREA	LARC	V MOHNEN	NAS 1-18942	6214
31	STATE U NY-STONY BRK	B A WIELICKI	LARC	R D CESS	NAG 1-1264	6246
31	STATE U NY-STONY BRK	J G WELLS	LARC	R DE ZAFRA	NAG 1-1354	6247
31	STATE U NY-STONY BRK	W TAO	GSFC	M A GELLER	NAG 5-1699	6252
31	STATE U NY-STONY BRK	D HAVRISIK	MSFC	F WALTER	NAG 8-844	6261
31	STATE U NY-STONY BRK	M J KURYLO	HQ	P M SOLOMON	NAGW 1560	6266
31	STATE U NY-STONY BRK	M J KURYLO	HQ	R DE ZAFRA	NAGW 2182	6268
31	STATE U NY-STONY BRK	J C DODGE	HQ	R D CESS	NAGW 3517	6276
31	STATE U NY-STONY BRK	C A REBER	GSFC	M A GELLER	NAS 5-31247	6282
31	ST U NY COL-PURCHASE	R W STEWART	GSFC	J TENENBAUM	NAG 5-2700	6291
31	ST U NY COL-PURCHASE	M HELFAND	GSFC	J TENENBAUM	NSG-5077	6292
31	SYRACUSE UNIVERSITY	R B ROOD	GSFC	G C FOX	NAG 5-2280	6303
31	DUKE UNIVERSITY	G ASRAR	HQ	R OREN	NGT 00-030-211	6341
31	NO CAROLINA STATE U	S E KOCH	GSFC	Y L LIN	NAG 5-1790	6388
31	NO CAROLINA STATE U	R F ADLER	GSFC	S E KOCH	NAG 5-2589	6392
31	NO CAROLINA STATE U	J A KAYE	HQ	P BLOOMFIELD	NAGW 3120	6398
31	NO CAROLINA STATE U	F H PROCTOR	LARC	Y L LIN	NCC 1-188	6417
31	UNIV N CAR-CHPL HILL	M J KURYLO	HQ	R E MILLER	NAGW 3881	6443
31	UNIV OF NORTH DAKOTA	D S MCDUGAL	LARC	M R POELLOT	NAG 1-1351	6458
31	OHIO STATE UNIV	B H PUTNEY	GSFC	C C GOAD	NAG 5-2041	6691
31	OHIO STATE UNIV	T W HAMILTON	GSFC	R H THOMAS	NAS 5-30946	6715
31	UNIV OF DAYTON	F J SCHMIDLIN	GSFC	J K LUERS	NAS 5-31661	6831
31	UNIV OKLAHOMA-NORMAN	F G HALL	GSFC	T GAL-CHEN	NAG 5-1379	6896
31	UNIV OKLAHOMA-NORMAN	J SIMPSON	GSFC	Y L KOGAN	NAG 5-1528	6897
31	UNIV OKLAHOMA-NORMAN	S J GOODMAN	MSFC	C E DUCHON	NAG 8-922	6901
31	OREGON STATE UNIV	T OWENS	LARC	J A COAKLEY	NAG 1-1234	6915
31	OREGON STATE UNIV	J W YOUNGBLOOD	LARC	J A COAKLEY	NAG 1-1263	6916
31	OREGON STATE UNIV	J E COOPER	LARC	J A COAKLEY	NAS 1-18992	6945
31	OREGON STATE UNIV	G L MADDREA	LARC	J A COAKLEY	NAS 1-19952	6946
31	OREGON STATE UNIV	R M HABERLE	ARC	J R BARNES	NCC 2-661	6948
31	UNIV OREGON-EUGENE	I G NOLT	LARC	K J PARK	NAG 1-963	6964
31	UNIV OREGON-EUGENE	J OWENS	MSFC	G D BOTHUN	NAG 8-1047	6970
31	DREXEL UNIVERSITY	R J BENDURA	LARC	A R BANDY	NAG 1-1224	7015
31	DREXEL UNIVERSITY	E P CONDON	ARC	A R BRANDY	NAG 2-876	7016
31	DREXEL UNIVERSITY	F R ROBERTSON	MSFC	D J DERKEY	NAG 8-924	7022
31	DREXEL UNIVERSITY	J E COOPER	LARC	F B HOUSE	NAS 1-18154	7025
31	PENN STATE U-UNIV PK	T OWENS	LARC	T P ACKERMAN	NAG 1-999	7043
31	PENN STATE U-UNIV PK	J M HOELL	LARC	W H BRUNE	NAG 1-1057	7045
31	PENN STATE U-UNIV PK	T OWENS	LARC	T P ACKERMAN	NAG 1-1095	7046
31	PENN STATE U-UNIV PK	J G WELLS	LARC	J J OLIVERO	NAG 1-1409	7052
31	PENN STATE U-UNIV PK	D S MCDUGAL	LARC	T P ACKERMAN	NAG 1-1547	7058
31	PENN STATE U-UNIV PK	E P CONDON	ARC	W H BRUNE	NAG 2-751	7062
31	PENN STATE U-UNIV PK	E CONDON	ARC	W BRUNE	NAG 2-826	7064
31	PENN STATE U-UNIV PK	D O STARR	GSFC	G G MACE	NAG 5-1810	7097
31	PENN STATE U-UNIV PK	R W STEWART	GSFC	T P ACKERMAN	NAG 5-2701	7115
31	PENN STATE U-UNIV PK	J VARGAS	MSFC	R H CORBET	NAG 8-231	7120
31	PENN STATE U-UNIV PK	C CARRINGTON	MSFC	R C THOMPSON	NAG 8-903	7124
31	PENN STATE U-UNIV PK	M J KURYLO	HQ	J OLIVERO	NAGW 1302	7128
31	PENN STATE U-UNIV PK	J D RUMMEL	HQ	J F KASTING	NAGW 1911	7133
31	PENN STATE U-UNIV PK	R D MCPETERS	HQ	T P ACKERMAN	NAGW 2209	7136
31	PENN STATE U-UNIV PK	M J KURYLO	HQ	W H BRUNE	NAGW 2670	7140
31	PENN STATE U-UNIV PK	J C DODGE	HQ	E J BARRON	NAGW 2686	7141
31	PENN STATE U-UNIV PK	J A KAYE	HQ	J J OLIVERO	NAGW 2712	7142
31	PENN STATE U-UNIV PK	L MAIER	KSC	G S FORBES	NAG10-137	7156
31	PENN STATE U-UNIV PK	D M BUTLER	HQ	A M VOGELMANN	NGT 00-030-042	7175
31	UNIV OF PITTSBURGH	J OWENS	MSFC	B R ESPEY	NAG 8-1049	7230
31	UNIV OF RHODE ISLAND	J D BARRICK	LARC	B G HEIKES	NAG 1-1222	7311

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	UNIV OF RHODE ISLAND	B E ANDERSON	LARC	R ARIMOTO	NAG 1-1225	7312
31	UNIV OF RHODE ISLAND	J M HOELL	LARC	J T MERRILL	NAG 1-1235	7313
31	UNIV OF RHODE ISLAND	J D BARRICK	LARC	B G HEIKES	NAG 1-1395	7314
31	UNIV OF RHODE ISLAND	L S WALTER	GSFC	H SIGURDSSON	NAG 5-1844	7316
31	UNIV OF RHODE ISLAND	J A KAYE	HQ	N W TINDALE	NAGW 3020	7321
31	CLEMSON UNIV-CLEMSON	E G STASSINOPOULOS	GSFC	P J MCNULTY	NAS 5-31750	7349
31	SO DAKOTA SCHL MINES	B A WIELICKI	LARC	S K SENGUPTA	NAG 1-542	7376
31	SO DAKOTA SCHL MINES	R F ADLER	GSFC	P SMITH	NAG 5-386	7377
31	SO DAKOTA SCHL MINES	R W STEWART	GSFC	A G DETWILER	NAG 5-2711	7378
31	SO DAKOTA SCHL MINES	R W STEWART	GSFC	R M WELCH	NAG 5-2712	7379
31	SO DAKOTA SCHL MINES	J T SUTTLES	HQ	R M WELCH	NAGW 3740	7380
31	SO DAKOTA SCHL MINES	J C DODGE	HQ	Q Y HAN	NAGW 3788	7381
31	SO DAKOTA SCHL MINES	J C DODGE	HQ	R M WELCH	NAGW 3922	7382
31	SO DAKOTA SCHL MINES	J C DODGE	HQ	R M WELSH	NAGW 3966	7383
31	SO DAKOTA SCHL MINES	P J SAKIMOTO	GSFC	S C MCCULLOH	NCA 5-115	7386
31	SO DAKOTA SCHL MINES	E M EMMANUEL	JSC	M AWIPI	NAG 9-455	7419
31	TENNESSEE STATE UNIV	J T BERGSTRALH	HQ	K FOX	NAGW 125	7440
31	UNIV TENNESSEE-KNOXV	J T BERGSTRALH	HQ	P A CLOUTIER	NAGW 3504	7555
31	RICE UNIVERSITY	F C OWENS	HQ	A FEW	NGT 00-050-698	7569
31	RICE UNIVERSITY	T L BELL	GSFC	G R NORTH	NAG 5-869	7614
31	TEXAS A&M UNIVERSITY	J R WANG	GSFC	T T WILHEIT	NAG 5-1423	7615
31	TEXAS A&M UNIVERSITY	J WEINMAN	GSFC	T T WILHEIT	NAG 5-1568	7616
31	TEXAS A&M UNIVERSITY	O THIELE	GSFC	E ZIPSER	NAG 5-1569	7617
31	TEXAS A&M UNIVERSITY	T BELL	GSFC	G R NORTH	NAG 5-1590	7618
31	TEXAS A&M UNIVERSITY	O W THIELE	GSFC	E ZIPSER	NAG 5-2033	7619
31	TEXAS A&M UNIVERSITY	O W THIELE	GSFC	T WILHEIT	NAG 5-2089	7620
31	TEXAS A&M UNIVERSITY	J W KAUFMAN	MSFC	J P MC GUIRK	NAG 8-299	7623
31	TEXAS A&M UNIVERSITY	S GOODMAN	MSFC	E J ZIPSER	NAG 8-912	7624
31	TEXAS A&M UNIVERSITY	C HERMAN	JSC	J S LINDER	NAG 9-331	7626
31	TEXAS A&M UNIVERSITY	J S THEON	HQ	R STEWART	NAGW 2922	7648
31	TEXAS A&M UNIVERSITY	J K ALEXANDER	HQ	W H MARLOW	NAGW 3054	7649
31	TEXAS A&M UNIVERSITY	J A KAYE	HQ	N W TINDALE	NAGW 3363	7651
31	TEXAS A&M UNIVERSITY	J A KAYE	HQ	K P BOWMAN	NAGW 3442	7652
31	TEXAS A&M UNIVERSITY	P HWONG	GSFC	T T WILHEIT	NAS 5-32593	7656
31	TEXAS A&M UNIVERSITY	C R CHAPPELL	MSFC	S A ARYA	NAG 8-818	7695
31	UNIV HOUSTON	D E ROBBINS	JSC	W R SHELTON	NAG 9-213	7716
31	U TEX-PAN AM-EDNBURG	J D ATKINSON	JSC	R H FOWLER	NAG 9-551	7768
31	U TEX-PAN AM-EDNBURG	J D ATKINSON	JSC	V I ALVARADO	NAG 9-552	7769
31	U TEX-PAN AM-EDNBURG	J D ATKINSON	JSC	J WIENER	NAG 9-553	7770
31	UNIV TEXAS-AUSTIN	M BALTUCK	HQ	B D TAPLEY	NAGW 1959	7867
31	UNIV TEXAS-AUSTIN	G ASRAR	HQ	K W BUTZER	NGT 00-030-194	7910
31	UNIV TEXAS-DALLAS	J T BERGSTRALH	HQ	F S JOHNSON	NAGW 1665	7941
31	UNIV TEXAS-DALLAS	J T BERGSTRALH	HQ	R R HODGES	NAGW 3444	7946
31	UNIV TEXAS-DALLAS	J MCGUIRE	GSFC	R HEILIS	NAS 5-32571	7949
31	UNIV TEXAS-DALLAS	J E JOHNSON	MSFC	B A TINSLEY	NAS 8-33827	7950
31	BRIGHAM YOUNG UNIV	D ADAMER	HQ	D LONG	NAGW 2461	7987
31	UNIV OF UTAH	D S MCDUGAL	LARC	K SASSEN	NAG 1-1314	7993
31	UNIV OF UTAH	H M HELFAND	GSFC	J N PAEGLE	NAG 5-127	7996
31	UNIV OF UTAH	M D CHOU	GSFC	K N LIOU	NAG 5-1050	7997
31	UNIV OF UTAH	J D SPINHIRNE	GSFC	K SASSEN	NAG 5-2338	8002
31	UNIV OF UTAH	R W STEWART	GSFC	K LIOU	NAG 5-2678	8004
31	UNIV OF UTAH	T P CHARLOCK	LARC	K N LIOU	NCC 1-189	8008
31	UNIV OF UTAH	J G WELLS	LARC	P J ESPY	NAG 1-1334	8012
31	UTAH STATE UNIV	J G WELLS	LARC	B WICKWAR	NAG 1-1335	8013
31	UTAH STATE UNIV	J C LUVALL	MSFC	J J MCDONNELL	NAG 8-897	8021
31	UTAH STATE UNIV	R SPILLINGER	HQ	W WATKINS	NAGW 3029	8025
31	UTAH STATE UNIV	J T BERGSTRALH	HQ	K L MILLER	NAGW 3689	8028
31	UTAH STATE UNIV	H H BRINTON	HQ	R WATTSON	NAGW 4057	8030
31	UTAH STATE UNIV	R E CAMPBELL	LARC	R ESPLIN	NAS 1-20080	8034
31	UTAH STATE UNIV	K HOLDER	MSFC	N STONE	NAS 8-37110	8035

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	CHRISTPHR NEWPORT U	C P RINSLAND	LARC	A M BUONCRISTIANI	NCC 1-179	8058
31	COLLEGE OF WM & MARY	J PARK	LARC	D C BENNER	NCC 1-43	8075
31	UNIV OF VIRGINIA	O W THIELE	GSFC	M GARSTANG	NAG 5-1978	8235
31	UNIV OF VIRGINIA	O W THIELE	GSFC	M GARSTANG	NAG 5-2061	8237
31	UNIV OF VIRGINIA	J T BERGSTALH	HQ	R E JOHNSON	NAGW 461	8241
31	UNIV OF VIRGINIA	K H BERGMAN	HQ	J J DORNING	NAGW 3021	8253
31	UNIV OF VIRGINIA	R WILLIAMS	HQ	R BARAGIOLA	NAGW 3959	8255
31	VIRGINIA POLY INST	J W DREWRY	LARC	M GARSTANG	NCC 1-106	8263
31	VIRGINIA POLY INST	R B LEE	LARC	J R MAHAN	NAG 1-1325	8333
31	VIRGINIA POLY INST	J W YOUNGBLOOD	LARC	J R MAHAN	NAG 1-1456	8341
31	VIRGINIA POLY INST	H G REICHLE JR.	LARC	L K PETERS	NAG 1-1598	8352
31	VIRGINIA POLY INST	R B LEE III	LARC	J R MAHAN	NAG 1-1640	8356
31	UNIV OF WASHINGTON	E E REMSBERG	LARC	K K TUNG	NAG 1-1404	8423
31	UNIV OF WASHINGTON	L J EHERNBERGER	ARC	D R DURRAN	NAG 2-682	8428
31	UNIV OF WASHINGTON	P PILEWSKIE	ARC	P V HOBBS	NAG 2-777	8432
31	UNIV OF WASHINGTON	O THIELE	GSFC	R A HOUZE	NAG 5-1599	8442
31	UNIV OF WASHINGTON	F HORZ	JSC	D E BROWNLEE	NAG 9-753	8460
31	UNIV OF WASHINGTON	R D MCPETERS	HQ	C B LEOVY	NAGW 471	8462
31	UNIV OF WASHINGTON	R D MCPETERS	HQ	J R HOLTON	NAGW 662	8463
31	UNIV OF WASHINGTON	R D MCPETERS	HQ	K K TUNG	NAGW 1605	8468
31	UNIV OF WASHINGTON	J C DODGE	HQ	R A BROWN	NAGW 1770	8471
31	UNIV OF WASHINGTON	J C DODGE	HQ	D L HARTMANN	NAGW 2633	8483
31	UNIV OF WASHINGTON	J A KAYE	HQ	S G WARREN	NAGW 2743	8486
31	UNIV OF WASHINGTON	J C DODGE	HQ	D L HARTMAN	NAGW 3475	8496
31	UNIV OF WASHINGTON	J C DODGE	HQ	R A BROWN	NAGW 3647	8501
31	UNIV OF WASHINGTON	J T SUTTLES	HQ	P V HOBBS	NAGW 3750	8503
31	UNIV OF WASHINGTON	J T SUTTLES	HQ	M B BAKER	NAGW 3754	8504
31	UNIV OF WASHINGTON	A C JANETOS	HQ	R CHARLSON	NAGW 3821	8507
31	UNIV OF WASHINGTON	J S THEON	HQ	B HOWE	NAGW 3960	8508
31	UNIV OF WASHINGTON	C REBER	GSFC	J R HOLTON	NAS 5-26301	8512
31	UNIV OF WASHINGTON	H BLODGET	GSFC	A R GILLESPIE	NAS 5-31372	8515
31	UNIV OF WASHINGTON	B TOON	ARC	P V HOBBS	NCA 2-623	8518
31	UNIV OF WASHINGTON	B TOON	ARC	P HOBBS	NCA 2-818	8520
31	UNIV OF WASHINGTON	G ASRAR	HQ	M B BAKER	NGT 00-030-004	8525
31	UNIV OF WASHINGTON	G ASRAR	HQ	K K TUNG	NGT 00-030-005	8526
31	UNIV OF WASHINGTON	G ASRAR	HQ	D HARTMANN	NGT 00-030-033	8529
31	UNIV OF WASHINGTON	D M BUTLER	HQ	B M PLOTKIN	NGT 00-030-043	8531
31	UNIV OF WASHINGTON	D M BUTLER	HQ	R M PINCUS	NGT 00-030-047	8532
31	UNIV OF WASHINGTON	D M BUTLER	HQ	P W MOTE	NGT 00-030-076	8534
31	UNIV OF WASHINGTON	D M BUTLER	HQ	J R NORRIS	NGT 00-030-092	8537
31	UNIV OF WASHINGTON	G ASRAR	HQ	R E BREIDENTHAL	NGT 00-030-176	8542
31	UNIV OF WASHINGTON	F C OWENS	HQ	D A ROTHROCK	NGT 00-050-652	8547
31	UNIV OF WASHINGTON	F C OWENS	HQ	M WENSMAN	NGT 00-050-723	8550
31	UNIV OF WASHINGTON	F SIX	MSFC	M BAKER	NGT 00-051-047	8556
31	UNIV OF WASHINGTON	I D BROWN	JSC	D E BROWNLEE	NSG-9052	8565
31	FAIRMONT STATE COLL.	K NIEWOEHNER	HQ	C WHITE	NCCW 50	8580
31	WEST VIRGINIA UNIV	W GROSE	LARC	W S LEWELLEN	NAG 1-1635	8585
31	WEST VIRGINIA UNIV	C R CHAPPELL	MSFC	R N ELI	NAG 8-149	8588
31	WEST VIRGINIA UNIV	K NIEWOEHNER	HQ	R E WALTER	NCCW 51	8591
31	WEST VIRGINIA UNIV	G ASRAR	HQ	T WARNER	NGT 00-030-193	8592
31	UNIV WISC-MADISON	T OWENS	LARC	V E SUOMI	NAG 1-553	8619
31	UNIV WISC-MADISON	T OWENS	LARC	E W ELORANTA	NAG 1-882	8620
31	UNIV WISC-MADISON	D S MCDUGAL	LARC	W L SMITH	NAG 1-1177	8621
31	UNIV WISC-MADISON	D E SISKIND	LARC	M H HITCHMAN	NAG 1-1403	8622
31	UNIV WISC-MADISON	R M ATLAS	GSFC	D R JOHNSON	NAG 5-81	8633
31	UNIV WISC-MADISON	F G HALL	GSFC	J M NORMAN	NAG 5-1416	8640
31	UNIV WISC-MADISON	R ADLER	GSFC	V E SUOMI	NAG 5-1586	8642
31	UNIV WISC-MADISON	L D TRAVIS	GSFC	S S LIMAYE	NAG 5-1609	8643
31	UNIV WISC-MADISON	C KUMMEROW	GSFC	W S OLSON	NAG 5-1659	8645
31	UNIV WISC-MADISON	P J MEYER	MSFC	W L HIBBARD	NAG 8-828	8672

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
31	UNIV WISC-MADISON	F R ROBERTSON	MSFC	G DRAK	NAG 8-927	8673
31	UNIV WISC-MADISON	J C DODGE	HQ	W P MENZEL	NAGW 1745	8681
31	UNIV WISC-MADISON	R A SCHIFFER	HQ	G R DIAK	NAGW 1858	8684
31	UNIV WISC-MADISON	J C DODGE	HQ	W L SMITH	NAGW 2053	8685
31	UNIV WISC-MADISON	R D MCPETERS	HQ	G C REINSEL	NAGW 2099	8686
31	UNIV WISC-MADISON	J A KAYE	HQ	M H HITOHMAN	NAGW 2943	8699
31	UNIV WISC-MADISON	K H BERGNAN	HQ	G WAHBA	NAGW 2961	8700
31	UNIV WISC-MADISON	M E MAIDEN	HQ	F P BRETHERTON	NAGW 3286	8703
31	UNIV WISC-MADISON	J C DODGE	HQ	D MARTIN	NAGW 3641	8706
31	UNIV WISC-MADISON	M J KURYLO	HQ	W L SMITH	NAGW 3889	8713
31	UNIV WISC-MADISON	M J KURYLO	HQ	D R JOHNSON	NAGW 3897	8715
31	UNIV WISC-MADISON	J C DODGE	HQ	S A ACKERMAN	NAGW 3935	8718
31	UNIV WISC-MADISON	G L MADDREA	LARC	M H HITCHMAN	NAS 1-19958	8724
31	UNIV WISC-MADISON	R ATLAS	GSFC	J ANDERSON	NAS 5-30752	8729
31	UNIV WISC-MADISON	H OSEROFF	GSFC	P MENZEL	NAS 5-31367	8730
31	UNIV WISC-MADISON	E KREINS	GSFC	H REVERCOMB	NAS 5-31375	8731
31	UNIV WISC-MADISON	T U RO	JSC	J P ROBERTS	NAS 9-18602	8737
31	UNIV WISC-MADISON	L E LASHER	ARC	L A SROMOVSKY	NCC 2-679	8740
31	UNIV WISC-MADISON	L E LASHER	ARC	L R SROMOVSKY	NCC 2-854	8742
31	UNIV WISC-MADISON	G SOFFEN	GSFC	P K WANG	NGT 00-051-208	8754
31	UNIV WISC-MADISON	J G WELLS JR.	LARC	T DESHLER	NAG 1-1623	8767
31	UNIV OF WYOMING	J T SUTTLES	HQ	T DESHER	NAGW 3749	8780
31	UNIV OF WYOMING	G L MADDREA	LARC	G VALI	NAS 1-18945	8781
32	UNIV ALASKA-FAIRBNKS	D PETERSON	ARC	L D HINZMAN	NCA 2-672	1259
32	ARIZONA STATE UNIV	I D BROWN	JSC	P R BUSECK	NAG 9-59	1294
32	ARIZONA STATE UNIV	I D BROWNE	JSC	C B MOORE	NAG 9-183	1295
32	ARIZONA STATE UNIV	J R UNDERWOOD	HQ	J FINK	NAGW 529	1296
32	ARIZONA STATE UNIV	J UNDERWOOD	HQ	P R CHRISTENSEN	NAGW 943	1298
32	ARIZONA STATE UNIV	J M BOYCE	HQ	R GREELEY	NAGW 1306	1299
32	ARIZONA STATE UNIV	J R UNDERWOOD	HQ	SANDERS	NAGW 1740	1302
32	ARIZONA STATE UNIV	J R UNDERWOOD	HQ	R GREELEY	NAGW 1774	1303
32	ARIZONA STATE UNIV	J D RUMMEL	HQ	J R CRONIN	NAGW 1899	1304
32	ARIZONA STATE UNIV	T A MAXWELL	HQ	R GREELEY	NAGW 2064	1305
32	ARIZONA STATE UNIV	T A MAXWELL	HQ	R GREELEY	NAGW 2102	1306
32	ARIZONA STATE UNIV	J M BOYCE	HQ	J R HOLLOWAY	NAGW 2221	1307
32	ARIZONA STATE UNIV	T A MAXWELL	HQ	P R CHRISTENSEN	NAGW 2289	1312
32	ARIZONA STATE UNIV	W L QUAIDE	HQ	R GREELEY	NAGW 2622	1314
32	ARIZONA STATE UNIV	J M BOYCE	HQ	R GREELEY	NAGW 2949	1316
32	ARIZONA STATE UNIV	H C BRINTON	HQ	P R BUSECK	NAGW 3386	1319
32	ARIZONA STATE UNIV	J T BERGSTRALH	HQ	R GREELEY	NAGW 3518	1320
32	ARIZONA STATE UNIV	J T BERGSTRALH	HQ	R E GRIMM	NAGW 3544	1321
32	ARIZONA STATE UNIV	RAHE	HQ	C MOORE	NAGW 3722	1322
32	ARIZONA STATE UNIV	J BOYCE	HQ	R GREELEY	NAGW 4042	1324
32	ARIZONA STATE UNIV	B F SMITH	ARC	R GREELEY	NCC 2-346	1330
32	ARIZONA STATE UNIV	M MOORE	HQ	W GRAF	NGT 00-070-155	1335
32	ARIZONA STATE UNIV	J M BOYCE	HQ	H E HOLT	NAGW 979	1341
32	NORTHERN ARIZONA U	J M BOYCE	HQ	C BARNES	NAGW 3800	1344
32	NORTHERN ARIZONA U	I D BROWNE	JSC	A J JULL	NAG 9-233	1406
32	UNIV OF ARIZONA	I D BROWNE	JSC	T D SWINDLE	NAG 9-240	1407
32	UNIV OF ARIZONA	J UNDERWOOD	HQ	V R BAKER	NAGW 285	1412
32	UNIV OF ARIZONA	J R UNDERWOOD	HQ	H J MELOSH	NAGW 428	1413
32	UNIV OF ARIZONA	J R UNDERWOOD	HQ	R J GREENBERG	NAGW 1029	1417
32	UNIV OF ARIZONA	J UNDERWOOD	HQ	R B SINGER	NAGW 1059	1419
32	UNIV OF ARIZONA	T A MAXWELL	HQ	L A LEBOWSKY	NAGW 1146	1420
32	UNIV OF ARIZONA	P R MAHAFFY	HQ	K C HSIEH	NAGW 1419	1424
32	UNIV OF ARIZONA	T A MAXWELL	HQ	L L HOOD	NAGW 1881	1430
32	UNIV OF ARIZONA	J M BOYCE	HQ	R G STROM	NAGW 2021	1435
32	UNIV OF ARIZONA	T A MAXWELL	HQ	E H LEVY	NAGW 2176	1437
32	UNIV OF ARIZONA	T A MAXWELL	HQ	R B SINGER	NAGW 2233	1439
32	UNIV OF ARIZONA	H C BRINTON	HQ	A J DESSLER	NAGW 3051	1470

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
32	UNIV OF ARIZONA	J K ALEXANDER	HQ	C P SONETT	NAGW 3084	1472
32	UNIV OF ARIZONA	H C BRINTON	HQ	M J DRAKE	NAGW 3348	1477
32	UNIV OF ARIZONA	H C BRINTON	HQ	W BOYNTON	NAGW 3373	1479
32	UNIV OF ARIZONA	J T BERGSTRAHL	HQ	H J MELOSH	NAGW 3410	1484
32	UNIV OF ARIZONA	J M BOYCE	HQ	C C PORCO	NAGW 3411	1485
32	UNIV OF ARIZONA	J T BERGSTRAHL	HQ	V R BAKER	NAGW 3515	1488
32	UNIV OF ARIZONA	J T BERGSTRAHL	HQ	A M VICKERY	NAGW 3562	1491
32	UNIV OF ARIZONA	J BOYCE	HQ	T SWINDLE	NAGW 3611	1492
32	UNIV OF ARIZONA	J M BOYCE	HQ	A J JULL	NAGW 3614	1493
32	UNIV OF ARIZONA	J M BOYCE	HQ	J GANGULY	NAGW 3638	1496
32	UNIV OF ARIZONA	N	HQ	W BOYNTON	NAGW 3694	1498
32	UNIV OF ARIZONA	J T BERGSTRAHL	HQ	R G STROM	NAGW 3705	1499
32	UNIV OF ARIZONA	R WILLIAMS	HQ	W BENZ	NAGW 3904	1504
32	UNIV OF ARIZONA	G ASRAR	HQ	C V HAYNES, J.R.	NGT 00-030-173	1533
32	UNIV OF ARIZONA	F C OWENS	HQ	M J DRAKE	NGT 00-050-612	1538
32	UNIV OF ARIZONA	F C OWENS	HQ	V R BAKER	NGT 00-050-662	1541
32	ARKANSAS COL	S H GOLDSTEIN	JSC	R BUSTIN	NAG 9-635	1569
32	UNIV ARKANSAS-FAYETV	I D BROWNE	JSC	D W SEARS	NAG 9-81	1573
32	UNIV ARKANSAS-FAYETV	H C BRINTON	HQ	D SEARS	NAGW 3479	1574
32	UNIV ARKANSAS-FAYETV	H C BRINTON	HQ	D SEARS	NAGW 3519	1575
32	CALIF INST OF TECH	I D BROWNE	JSC	G J WASSERBURG	NAG 9-43	1622
32	CALIF INST OF TECH	I D BROWNE	JSC	A L ALBEE	NAG 9-185	1624
32	CALIF INST OF TECH	J UNDERWOOD	HQ	D J STEVENSON	NAGW 185	1627
32	CALIF INST OF TECH	T A MAXWELL	HQ	T J AHRENS	NAGW 1941	1635
32	CALIF INST OF TECH	T A MAXWELL	HQ	T J AHRENS	NAGW 1953	1636
32	CALIF INST OF TECH	J M BOYCE	HQ	Y L YUNG	NAGW 2204	1641
32	CALIF INST OF TECH	J M BOYCE	HQ	D O MUHLEMAN	NAGW 3011	1661
32	CALIF INST OF TECH	G C BRINTON	HQ	G J WASSERBURG	NAGW 3297	1669
32	CALIF INST OF TECH	C H BRINTON	HQ	H P TAYLOR	NAGW 3329	1671
32	CALIF INST OF TECH	H C BRINTON	HQ	G J WASSERBURG	NAGW 3337	1672
32	CALIF INST OF TECH	J T BERGSTRAHL	HQ	D O MUHLEMAN	NAGW 3393	1673
32	CALIF INST OF TECH	J T BERGSTRAHL	HQ	D J STEVENSON	NAGW 3491	1674
32	CALIF INST OF TECH	J T BERGSTRAHL	HQ	Y L YUNG	NAGW 3507	1675
32	CALIF INST OF TECH	H C BRINTON	HQ	E STOLPER	NAGW 3533	1676
32	CALIF INST OF TECH	H C BRINTON	HQ	D S BURNETT	NAGW 3534	1677
32	CALIF INST OF TECH	H C BRINTON	HQ	D S BURNETT	NAGW 3592	1678
32	CALIF INST OF TECH	J BOYCE	HQ	S EPSTEIN	NAGW 3883	1680
32	SAN FRAN STATE UNIV	T A MAXWELL	HQ	J B ORENBERG	NAGW 2212	1789
32	SAN JOSE STATE UNIV	J M BOYCE	HQ	E A MAROUF	NAGW 3656	1810
32	SAN JOSE STATE UNIV	M FONDA	ARC	E METZGER	NCC 2-5047	1851
32	STANFORD UNIVERSITY	M BALTUCK	HQ	W G ERNST	NAGW 1918	1919
32	STANFORD UNIVERSITY	T A MAXWELL	HQ	G L TYLER	NAGW 2140	1922
32	STANFORD UNIVERSITY	J BOYCE	HQ	R ZARE	NAGW 3629	1939
32	STANFORD UNIVERSITY	J T BERGSTRAHL	HQ	G L TYLER	NAGW 3702	1940
32	STANFORD UNIVERSITY	D J DES MARAIS	ARC	D R LOWE	NCC 2-721	1981
32	STANFORD UNIVERSITY	D HOLLAND	HQ	J OLIGER	NGT 00-051-285	2028
32	UNIV CALIF-BERKELEY	J UNDERWOOD	HQ	R JEANLOZ	NAGW 604	2109
32	UNIV CALIF-BERKELEY	J M BOYCE	HQ	W ALVAREZ	NAGW 3008	2136
32	UNIV CALIF-BERKELEY	J BOYCE	HQ	K NISHIZUMI	NAGW 3514	2145
32	UNIV CALIF-BERKELEY	G ASRAR	HQ	D E GRANGER	NGT 00-030-105	2199
32	UNIV CALIF-BERKELEY	G ASRAR	HQ	W ALVAREZ	NGT 00-030-191	2203
32	UNIV CALIF-DAVIS	T BRAKKE	GSFC	S USTIN	NAS 5-31714	2259
32	UNIV CALIF-L ANGELES	J E WELKER	GSFC	W KAULA	NAG 5-1040	2368
32	UNIV CALIF-L ANGELES	L S WALTER	GSFC	R P TURCO	NAG 5-1845	2380
32	UNIV CALIF-L ANGELES	J M BOYCE	HQ	D A PAIGE	NAGW 2063	2405
32	UNIV CALIF-L ANGELES	T A MAXWELL	HQ	W H KAULA	NAGW 2085	2407
32	UNIV CALIF-L ANGELES	T A MAXWELL	HQ	G SCHUBERT	NAGW 2086	2408
32	UNIV CALIF-L ANGELES	J D RUMNEL	HQ	J W SCHOPF	NAGW 2147	2409
32	UNIV CALIF-L ANGELES	T A MAXWELL	HQ	D A PAIGE	NAGW 2226	2411
32	UNIV CALIF-L ANGELES	W L QUAIDE	HQ	J LUHMANN	NAGW 2295	2415

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
32	UNIV CALIF-L ANGELES	A J ANDERSON	HQ	P ROBERTS	NAGW 2546	2419
32	UNIV CALIF-L ANGELES	M BALTUCK	HQ	G SCHUBERT	NAGW 2646	2423
32	UNIV CALIF-L ANGELES	R E MURPHY	HQ	W M KAULA	NAGW 2997	2428
32	UNIV CALIF-L ANGELES	R E MURPHY	HQ	P BIRD	NAGW 3042	2429
32	UNIV CALIF-L ANGELES	H C BRINTON	HQ	P H WARREN	NAGW 3308	2436
32	UNIV CALIF-L ANGELES	J T BERGSTRAHL	HQ	D L BINDSCHADLER	NAGW 3484	2442
32	UNIV CALIF-L ANGELES	J BOYCE	HQ	J WASSON	NAGW 3535	2445
32	UNIV CALIF-L ANGELES	J T BERGSTRAHL	HQ	G SCHUBERT	NAGW 3546	2446
32	UNIV CALIF-L ANGELES	M BALTUCK	HQ	J VILLASENOR	NAGW 3829	2451
32	UNIV CALIF-L ANGELES	P ROGERS	HQ	K D MCKEEGAN	NAGW 4112	2459
32	UNIV CALIF-L ANGELES	C HIX	JPL	D A PAUGE	NGT 00-051-273	2485
32	UNIV CALIF-L ANGELES	B A WIELICKI	LARC	V RAMANATHAN	NAG 1-1259	2496
32	UNIV CALIF-SAN DIEGO	J I TROMBKA	GSFC	J ARNOLD	NAG 5-530	2510
32	UNIV CALIF-SAN DIEGO	B G BILLS	GSFC	J B MINSTER	NAG 5-1910	2518
32	UNIV CALIF-SAN DIEGO	B G BILLS	GSFC	F N SPIESS	NAG 5-1914	2519
32	UNIV CALIF-SAN DIEGO	B G BILLS	GSFC	Y BOCK	NAG 5-1917	2520
32	UNIV CALIF-SAN DIEGO	B G BILLS	GSFC	D C AGNEW	NAG 5-1932	2521
32	UNIV CALIF-SAN DIEGO	I D BROWNE	JSC	G W LUGMAIR	NAG 9-49	2534
32	UNIV CALIF-SAN DIEGO	I D BROWNE	JSC	M H THIEMENS	NAG 9-83	2535
32	UNIV CALIF-SAN DIEGO	T A MAXWELL	HQ	L MCFADDEN	NAGW 2215	2552
32	UNIV CALIF-SAN DIEGO	M BALTUCK	HQ	Y BOCK	NAGW 2641	2560
32	UNIV CALIF-SAN DIEGO	A J ANDERSON	HQ	C CONSTABLE	NAGW 2966	2568
32	UNIV CALIF-SAN DIEGO	R E MURPHY	HQ	G BACKUS	NAGW 2967	2569
32	UNIV CALIF-SAN DIEGO	R E MURPHY	HQ	D T SANDWELL	NAGW 3035	2571
32	UNIV CALIF-SAN DIEGO	H C BRINTON	HQ	G W LUGMAIR	NAGW 3285	2576
32	UNIV CALIF-SAN DIEGO	H C BRINTON	HQ	K MARTI	NAGW 3428	2577
32	UNIV CALIF-SAN DIEGO	J T BERGSTRAHL	HQ	D T SANDWELL	NAGW 3503	2579
32	UNIV CALIF-SAN DIEGO	J BOYCE	HQ	M THIEMANS	NAGW 3551	2580
32	UNIV CALIF-SAN DIEGO	M BALTUCK	HQ	C CONSTABLE	NAGW 3932	2583
32	UNIV CALIF-SAN DIEGO	J D RUMMEL	HQ	S M AWRAMIK	NAGW 1948	2638
32	UNIV CALIF-S BARBARA	T BRAKKE	GSFC	D DOZLER	NAS 5-31710	2658
32	UNIV CALIF-S BARBARA	J R UNDERWOOD	HQ	F BRIDGES	NAGW 590	2677
32	UNIV CALIF-S CRUZ	A NOVOTNY	HQ	R S ANDERSON	NGT 00-051-220	2701
32	UNIV CALIF-S CRUZ	T A MAXWELL	HQ	D S GORSLINE	NAGW 2235	2728
32	UNIV OF SOUTHERN CAL	B G MITCHELL	HQ	D A KIEFER	NAGW 2558	2730
32	UNIV OF SOUTHERN CAL	J M BOYCE	HQ	D S GORSLINE	NAGW 2902	2733
32	UNIV OF SOUTHERN CAL	J T BERGSTRAHL	HQ	C G SAMMIS	NAGW 3547	2739
32	UNIV OF SOUTHERN CAL	M BALTUCK	HQ	D BURBANK	NAGW 3762	2741
32	UNIV OF SOUTHERN CAL	G ASRAR	HQ	C A DEMOTT	NGT 00-030-099	2796
32	COLORADO STATE UNIV	G ASRAR	HQ	T L JENSEN	NGT 00-030-106	2797
32	COLORADO STATE UNIV	G ASRAR	HQ	A S DENNING	NGT 00-030-150	2800
32	COLORADO STATE UNIV	B G BILLS	GSFC	K LARSON	NAG 5-1908	2872
32	UNIV COLORADO-BOLDR	B G BILLS	GSFC	J B RUNDLE	NAG 5-2353	2890
32	UNIV COLORADO-BOLDR	D J HARDING	GSFC	R BILHAM	NAG 5-2584	2905
32	UNIV COLORADO-BOLDR	J R UNDERWOOD	HQ	B JAKOSKY	NAGW 771	2935
32	UNIV COLORADO-BOLDR	M BALTUCK	HQ	A GOETZ	NAGW 2070	2954
32	UNIV COLORADO-BOLDR	J M BOYCE	HQ	B JAKOSKY	NAGW 2286	2959
32	UNIV COLORADO-BOLDR	T A MAXWELL	HQ	S W LEE	NAGW 2318	2960
32	UNIV COLORADO-BOLDR	M BALTUCK	HQ	F BAGENAL	NAGW 2651	2969
32	UNIV COLORADO-BOLDR	J M BOYCE	HQ	G R STEWART	NAGW 2895	2979
32	UNIV COLORADO-BOLDR	R E MURPHY	HQ	J M WAHR	NAGW 2985	2987
32	UNIV COLORADO-BOLDR	R E MURPHY	HQ	J M WAHR	NAGW 3034	2992
32	UNIV COLORADO-BOLDR	R WILLIAMS	HQ	G STEWART	NAGW 3961	3020
32	UNIV COLORADO-BOLDR	G ASRAR	HQ	A F GOETZ	NGT 00-030-175	3061
32	UNIV COLORADO-BOLDR	T A MAXWELL	HQ	S F DERMOTT	NAGW 1923	3419
32	UNIV OF FLORIDA	J BOYCE	HQ	B A GUSTAFSON	NAGW 2775	3423
32	UNIV OF FLORIDA	B G BILLS	GSFC	C HARRISON	NAG 5-1945	3457
32	UNIV OF MIAMI	B G BILLS	GSFC	T H DIXON	NAG 5-2207	3458
32	UNIV OF MIAMI	B G BILLS	GSFC	T H DIXON	NAG 5-2208	3459
32	UNIV OF MIAMI	B G BILLS	GSFC	T H DIXON	NAG 5-2209	3460

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
32	UNIV OF MIAMI	M BALTUCK	HQ	T DIXON	NAGW 3316	3466
32	UNIV OF HAWAII-MANOA	J UNDERWOOD	HQ	B R HAWKE	NAGW 237	3681
32	UNIV OF HAWAII-MANOA	J R UNDERWOOD	HQ	P M MARK	NAGW 437	3682
32	UNIV OF HAWAII-MANOA	J UNDERWOOD	HQ	F P FANALE	NAGW 583	3683
32	UNIV OF HAWAII-MANOA	J UNDERWOOD JR	HQ	J F BELL	NAGW 712	3684
32	UNIV OF HAWAII-MANOA	T A MAXWELL	HQ	B R HAWKE	NAGW 1053	3689
32	UNIV OF HAWAII-MANOA	M BALTUCK	HQ	P J MARK	NAGW 1162	3690
32	UNIV OF HAWAII-MANOA	T A MAXWELL	HQ	P G LUCEY	NAGW 1421	3691
32	UNIV OF HAWAII-MANOA	M BALTUCK	HQ	S SELF	NAGW 1929	3697
32	UNIV OF HAWAII-MANOA	T A MAXWELL	HQ	T OWEN	NAGW 2153	3699
32	UNIV OF HAWAII-MANOA	T A MAXWELL	HQ	T B MCCORD	NAGW 2174	3700
32	UNIV OF HAWAII-MANOA	R H THOMAS	HQ	P J MOUGINIS-MARK	NAGW 2521	3704
32	UNIV OF HAWAII-MANOA	J M BOYCE	HQ	P J MARK	NAGW 2955	3708
32	UNIV OF HAWAII-MANOA	R E MURPHY	HQ	D BERCOVICI	NAGW 3015	3709
32	UNIV OF HAWAII-MANOA	J M BOYCE	HQ	T B MCCORD	NAGW 3218	3713
32	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	K KEIL	NAGW 3281	3714
32	UNIV OF HAWAII-MANOA	H C BRINTON	HQ	F P FANALE	NAGW 3294	3715
32	UNIV OF HAWAII-MANOA	J T BERGSTRALH	HQ	P J MOUGINIS-MARK	NAGW 3500	3720
32	UNIV OF HAWAII-MANOA	J T BERGSTRALH	HQ	D BERCOVICI	NAGW 3531	3721
32	UNIV OF HAWAII-MANOA	C PILCHER	HQ	G J TAYLOR	NAGW 3537	3722
32	UNIV OF HAWAII-MANOA	J M BOYCE	HQ	G J TAYLOR	NAGW 3684	3725
32	UNIV OF HAWAII-MANOA	G ASRAR	HQ	T THODARSON	NGT 00-030-009	3746
32	UNIV OF HAWAII-MANOA	D M BUTLER	HQ	K A HORTON	NGT 00-030-054	3748
32	UNIV OF HAWAII-MANOA	G ASRAR	HQ	J R CHRISTIAN	NGT 00-030-104	3749
32	UNIV OF HAWAII-MANOA	G ASRAR	HQ	R E HOLASEK	NGT 00-030-137	3750
32	UNIV OF HAWAII-MANOA	J K ALEXANDER	HQ	G J TAYLOR	NGT 00-050-930	3753
32	NORTHWESTERN UNIV	B G BILLS	GSFC	R G GORDON	NAG 5-1944	3791
32	NORTHWESTERN UNIV	B G BILLS	GSFC	S A STEIN	NAG 5-2003	3792
32	NORTHWESTERN UNIV	B G BILLS	GSFC	S STEIN	NAG 5-2431	3794
32	NORTHWESTERN UNIV	M BALTUCK	HQ	S STEIN	NAGW 2522	3803
32	NORTHWESTERN UNIV	J T BERGSTRALH	HQ	D M JURDY	NAGW 3693	3810
32	NORTHWESTERN UNIV	F C OWENS	HQ	S STEIN	NGT 00-050-571	3819
32	SO ILL UNIV-CARBONDL	P TAYLOR	GSFC	D N RAVAT	NCC 5-70	3832
32	UNIV OF CHICAGO	J D RUMMEL	HQ	D M RAUP	NAGW 1508	3866
32	UNIV OF CHICAGO	M MEYER	HQ	D M RAUP	NAGW 1527	3867
32	UNIV OF CHICAGO	J D RUMMEL	HQ	J J SEPKOSKI	NAGW 1693	3870
32	UNIV OF CHICAGO	P R MAHAFFY	HQ	T ECONOMU	NAGW 1847	3871
32	UNIV OF CHICAGO	H C BRINTON	HQ	L GROSSMAN	NAGW 3340	3888
32	UNIV OF CHICAGO	H C BRINTON	HQ	R LEWIS	NAGW 3342	3889
32	UNIV OF CHICAGO	H C BRINTON	HQ	A DAVIS	NAGW 3384	3891
32	UNIV OF CHICAGO	H C BRINTON	HQ	I STEELE	NAGW 3416	3892
32	UNIV OF CHICAGO	J BOYCE	HQ	S SUTTON	NAGW 3651	3894
32	UNIV ILLINOIS-URBANA	J T BERGSTRALH	HQ	A T HSUI	NAGW 3541	3984
32	DE PAUW UNIVERSITY	T A MAXWELL	HQ	K H PRICE	NAGW 2336	4012
32	INDIANA ST UNIV	B G BILLS	GSFC	S DE SILVA	NAG 5-1734	4014
32	INDIANA U-BLOOMINGTN	J D RUMMEL	HQ	J M HAYES	NAGW 1940	4025
32	INDIANA U-BLOOMINGTN	H C BRINTON	HQ	A BASU	NAGW 3404	4028
32	INDIANA U-BLOOMINGTN	G ASRAR	HQ	K L LECKRONE	NGT 00-030-125	4031
32	INDIANA U-BLOOMINGTN	I D BROWNE	JSC	A BASU	NSG-9077	4034
32	PURDUE UNIVERSITY	J BOYCE	HQ	M LIPSCHUTZ	NAGW 3460	4083
32	EMPORIA STATE UNIV	F SIX	MSFC	J S ABER	NAG 8-215	4238
32	KANSAS STATE UNIV	D H SCOTT	HQ	J R UNDERWOOD	NAGW 1111	4241
32	UNIV OF KANSAS	G ASRAR	HQ	A F ARBOGAST	NGT 00-030-140	4269
32	LA ST U&A&M COL-BRGE	M BALTUCK	HQ	O HUH	NAGW 2052	4321
32	LA ST U&A&M COL-BRGE	B SWINFORD	MSFC	N LAM	NGT 00-051-183	4338
32	JOHNS HOPKINS UNIV	D E SMITH	GSFC	M T ZUBER	NAG 5-2222	4425
32	JOHNS HOPKINS UNIV	S COHEN	GSFC	M T ZUBER	NAG 5-2223	4426
32	JOHNS HOPKINS UNIV	T A MAXWELL	HQ	J W SALISBURY	NAGW 1885	4447
32	JOHNS HOPKINS UNIV	J M BOYCE	HQ	M T ZUBER	NAGW 3394	4476
32	JOHNS HOPKINS UNIV	J T BERGSTRALH	HQ	M T ZUBER	NAGW 3697	4479

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
32	JOHNS HOPKINS UNIV	J T LYNCH	HQ	M T ZUBER	NGT 00-050-587	4498
32	UNIV MARYLAND-COL PK	L S WALTER	GSFC	M C RABENHORST	NAG 5-1834	4572
32	UNIV MARYLAND-COL PK	L S WALTER	GSFC	G J BLUTH	NAG 5-2406	4601
32	UNIV MARYLAND-COL PK	J T BERGSTRALH	HQ	M J A'HEARN	NAGW 1813	4623
32	UNIV MARYLAND-COL PK	J M BOYCE	HQ	M W SCHAEFER	NAGW 3588	4659
32	UNIV MARYLAND-COL PK	J BOYCE	HQ	R WALKER	NAGW 3625	4662
32	UNIV MARYLAND-COL PK	J B GARVIN	GSFC	C C SCHNETZLER	NCC 5-58	4694
32	HARVARD UNIVERSITY	J D RUMMEL	HQ	A D HOLLAND	NAGW 599	4801
32	HARVARD UNIVERSITY	J D RUMMEL	HQ	A H KNOLL	NAGW 893	4803
32	HARVARD UNIVERSITY	J M BOYCE	HQ	A G CAMERON	NAGW 1598	4806
32	HARVARD UNIVERSITY	R E MURPHY	HQ	R J O'CONNELL	NAGW 3000	4815
32	HARVARD UNIVERSITY	B F CHAO	HQ	J BLOXHAM	NAGW 3467	4818
32	HARVARD UNIVERSITY	J D RUMMEL	HQ	A H KNOLL	NAGW 3659	4820
32	HARVARD UNIVERSITY	J BOYCE	HQ	C AGE	NAGW 3996	4821
32	MASS INST OF TECH	J E WELKER	GSFC	R HAGER	NAG 5-1686	4922
32	MASS INST OF TECH	B G BILLS	GSFC	T H JORDAN	NAG 5-1905	4926
32	MASS INST OF TECH	B G BILLS	GSFC	A E ROGERS	NAG 5-1906	4927
32	MASS INST OF TECH	B G BILLS	GSFC	B H HAGER	NAG 5-1911	4928
32	MASS INST OF TECH	B G BILLS	GSFC	S C SOLOMAN	NAG 5-1921	4929
32	MASS INST OF TECH	I D BROWNE	JSC	T L GROVE	NAG 9-302	4968
32	MASS INST OF TECH	J R UNDERWOOD	HQ	J WISDOM	NAGW 706	4975
32	MASS INST OF TECH	T A MAXWELL	HQ	S C SOLOMON	NAGW 1937	4990
32	MASS INST OF TECH	T A MAXWELL	HQ	R BURNS	NAGW 2049	4996
32	MASS INST OF TECH	M BALTUCK	HQ	B G BURCHFIELD	NAGW 2155	4998
32	MASS INST OF TECH	T A MAXWELL	HQ	B H HAGER	NAGW 2161	4999
32	MASS INST OF TECH	T A MAXWELL	HQ	R G BURNS	NAGW 2220	5001
32	MASS INST OF TECH	M BALTUCK	HQ	M MCNUTT	NAGW 2629	5007
32	MASS INST OF TECH	J D RUMMEL	HQ	J P GROTZINGER	NAGW 2795	5010
32	MASS INST OF TECH	R E MURPHY	HQ	T A HERRING	NAGW 3007	5016
32	MASS INST OF TECH	R E MURPHY	HQ	T H JORDAN	NAGW 3036	5017
32	MASS INST OF TECH	J BOYCE	HQ	T GROVE	NAGW 3586	5026
32	MASS INST OF TECH	J BOYCE	HQ	R PRINN	NAGW 3608	5027
32	MASS INST OF TECH	J T BERGSTRALH	HQ	P G FORD	NAGW 3787	5028
32	MASS INST OF TECH	W T WILDES	GSFC	A E ROGERS	NAS 5-30543	5038
32	MASS INST OF TECH	E KREINS	GSFC	D H STACLIN	NAS 5-31376	5041
32	MASS INST OF TECH	B WILDES	GSFC	A R WHITNEY	NAS 5-31728	5043
32	MASS INST OF TECH	W WILDES	GSFC	A NEILL	NAS 5-32353	5044
32	UNIV OF MASS-AMHERST	J D RUMMEL	HQ	W M IRVINE	NAGW 436	5111
32	UNIV OF MASS-AMHERST	T A MAXWELL	HQ	G E MCGILL	NAGW 1965	5117
32	UNIV OF MASS-AMHERST	T A MAXWELL	HQ	G E MCGILL	NAGW 2223	5119
32	UNIV OF MASS-AMHERST	J T BERGSTRALH	HQ	G E MCGILL	NAGW 3532	5121
32	WELLESLEY COLLEGE	J UNDERWOOD	HQ	R G FRENCH	NAGW 1368	5136
32	WORCESTER POLY INST	J M BOYCE	HQ	R C PLUMB	NAGW 2234	5150
32	GRAND VALLEY ST UNI	R E MURPHY	HQ	A S TROPIN	NAGW 3006	5160
32	MICHIGAN TECH UNIV	L S WALTER	GSFC	W I ROSE	NAG 5-1838	5183
32	MICHIGAN TECH UNIV	G ASRAR	HQ	W I ROSE	NGT 00-030-174	5190
32	UNIV MICH-ANN ARBOR	T A MAXWELL	HQ	A W ENGLAND	NAGW 2199	5278
32	U MINN-MNPLS-ST PAUL	D S MCDAY	JSC	P WEIBLEN	NAG 9-534	5390
32	U MINN-MNPLS-ST PAUL	M BALTUCK	HQ	D A YUEN	NAGW 1957	5394
32	U MINN-MNPLS-ST PAUL	J M BOYCE	HQ	D L KOHISTEDT	NAGW 3102	5402
32	U MINN-MNPLS-ST PAUL	J BOYCE	HQ	A NIER	NAGW 3610	5406
32	UNIV MO-COLUMBIA	B G BILLS	GSFC	J ENGEL	NAG 5-2425	5488
32	UNIV MO-COLUMBIA	M BALTUCK	HQ	J F ENGEH	NAGW 3302	5494
32	WASHINGTON UNIVERSTY	I D BROWNE	JSC	R M WALKER	NAG 9-55	5514
32	WASHINGTON UNIVERSTY	I D BROWNE	JSC	L A HASKIN	NAG 9-56	5515
32	WASHINGTON UNIVERSTY	I D BROWNE	JSC	F A PODOSEK	NAG 9-292	5516
32	WASHINGTON UNIVERSTY	J UNDERWOOD	HQ	W B MCKINNON	NAGW 432	5520
32	WASHINGTON UNIVERSTY	M BALTUCK	HQ	R E ARVIDSON	NAGW 1358	5521
32	WASHINGTON UNIVERSTY	T A MAXWELL	HQ	R E ARVIDSON	NAGW 1872	5522
32	WASHINGTON UNIVERSTY	R WILLIAMS	HQ	R J PHILLIPS	NAGW 3024	5533

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
32	WASHINGTON UNIVERSITY	H C BRINTON	HQ	L A HASKIN	NAGW 3343	5536
32	WASHINGTON UNIVERSITY	H C BRINTON	HQ	C M HOHENBERG	NAGW 3344	5537
32	WASHINGTON UNIVERSITY	J BOYCE	HQ	R M WALKER	NAGW 3371	5538
32	WASHINGTON UNIVERSITY	J T BERGSTRAHL	HQ	R E ARVIDSON	NAGW 3419	5539
32	WASHINGTON UNIVERSITY	J T BERGSTRAHL	HQ	B FEAKY	NAGW 3446	5541
32	WASHINGTON UNIVERSITY	J T BERGSTRAHL	HQ	W B MCKINNON	NAGW 3552	5542
32	WASHINGTON UNIVERSITY	J BOYCE	HQ	F PODESEK	NAGW 3634	5543
32	WASHINGTON UNIVERSITY	J T BERGSTRAHL	HQ	R J PHILLIPS	NAGW 3701	5544
32	MONTANA STATE UNIV	E PRIOR	LARC	J P WILSON	NGT 00-051-196	5568
32	UNIV OF MONTANA	F SIX	MSFC	N W HINMAN	NAG 8-235	5571
32	UNIV NEVADA-DRI	A J TUYAHOV	HQ	J V TARANIK	NAGW 2562	5611
32	UNIV OF NEVADA-RENO	T A MAXWELL	HQ	R A SCHULTZ	NAGW 2347	5616
32	UNIV OF NEVADA-RENO	C R STOKER	ARC	R A WHARTON	NCA 2-799	5618
32	DARTMOUTH COLLEGE	M BALTUCK	HQ	R BRAKENRIDGE	NAGW 3227	5635
32	DARTMOUTH COLLEGE	J T BERGSTRAHL	HQ	G R BRAKENRIDGE	NAGW 3506	5636
32	DARTMOUTH COLLEGE	R WILLIAMS	HQ	G R BRAKENRIDGE	NAGW 4003	5639
32	UNIV NEW HAMP-DURHAM	D L WILLIAMS	GSFC	B N ROCK	NCC 5-56	5707
32	PRINCETON UNIVERSITY	B G BILLS	GSFC	W J MORGAN	NAG 5-1940	5741
32	PRINCETON UNIVERSITY	J M BOYCE	HQ	A M RUBIN	NAGW 3589	5766
32	PRINCETON UNIVERSITY	J T BERGSTRAHL	HQ	J SUPPE	NAGW 3706	5767
32	RUTGERS ST U-N BRNSK	I D BROWNE	JSC	R H HEWINS	NAG 9-35	5792
32	RUTGERS ST U-N BRNSK	I D BROWNE	JSC	J S DELANEY	NAG 9-304	5793
32	RUTGERS ST U-N BRNSK	F C OWENS	HQ	R H HEWINS	NGT 00-050-836	5800
32	RUTGERS ST U-NEWARK	J BOYCE	HQ	G F HERZOG	NAGW 3499	5802
32	RUTGERS ST U-PISCTWY	RAHE	HQ	J DELANEY	NAGW 3649	5809
32	UNIV OF NEW MEXICO	L S WALTER	GSFC	L D MCFADDEN	NAG 5-1828	5871
32	UNIV OF NEW MEXICO	I D BROWNE	JSC	F J RIETMEIJER	NAG 9-160	5881
32	UNIV OF NEW MEXICO	H C BRINTON	HQ	J J PAPIKE	NAGW 3347	5886
32	UNIV OF NEW MEXICO	J BOYCE	HQ	F RIETMEIJER	NAGW 3626	5887
32	UNIV OF NEW MEXICO	F C OWENS	HQ	J J PAPIKE	NGT 00-070-223	5890
32	COLUMBIA UNIVERSITY	B G BILLS	GSFC	J BEAVAN	NAG 5-1948	5939
32	COLUMBIA UNIVERSITY	B G BILLS	GSFC	J BEAVAN	NAG 5-1949	5940
32	COLUMBIA UNIVERSITY	G S LAGERLOEF	HQ	A L GORDON	NAGW 1925	5966
32	COLUMBIA UNIVERSITY	H C BRINTON	HQ	J LONGHI	NAGW 3407	5981
32	COLUMBIA UNIVERSITY	H C BRINTON	HQ	J LONGHI	NAGW 3434	5982
32	COLUMBIA UNIVERSITY	B A CARLSON	GSFC	G J KUKLA	NCC 5-72	5993
32	CORNELL UNIVERSITY	G ASRAR	HQ	W S BROECKER	NGT 00-030-171	5997
32	CORNELL UNIVERSITY	J UNDERWOOD	HQ	J A BURNS	NAGW 310	6050
32	CORNELL UNIVERSITY	J R UNDERWOOD	HQ	P D NICHOLSON	NAGW 544	6052
32	CORNELL UNIVERSITY	J UNDERWOOD	HQ	S SQUYRES	NAGW 1023	6054
32	CORNELL UNIVERSITY	J R UNDERWOOD	HQ	D L TURCOTTE	NAGW 1420	6055
32	CORNELL UNIVERSITY	T A MAXWELL	HQ	C SAGAN	NAGW 1870	6057
32	CORNELL UNIVERSITY	T A MAXWELL	HQ	J VEVERKA	NAGW 2084	6061
32	CORNELL UNIVERSITY	T A MAXWELL	HQ	J VEVERKA	NAGW 2149	6062
32	CORNELL UNIVERSITY	T A MAXWELL	HQ	J VEVERKA	NAGW 2186	6063
32	CORNELL UNIVERSITY	H C BRINTON	HQ	P C THOMAS	NAGW 3274	6078
32	CORNELL UNIVERSITY	H C BRINTON	HQ	P C THOMAS	NAGW 3275	6079
32	CORNELL UNIVERSITY	P ROGERS	HQ	S W SQUYRES	NAGW 3487	6083
32	CORNELL UNIVERSITY	J T BERGSTRAHL	HQ	D L TURCOTTE	NAGW 3597	6085
32	CORNELL UNIVERSITY	R WILLIAMS	HQ	D CAMPBELL	NAGW 3985	6088
32	CORNELL UNIVERSITY	F C OWENS	HQ	T E JORDAN	NGT 00-050-654	6099
32	CORNELL UNIVERSITY	F C OWENS	HQ	T JORDAN	NGT 00-050-852	6107
32	CORNELL UNIVERSITY	A NOROTNY	HQ	B L ISACKS	NGT 00-051-223	6113
32	HUNTER COLLEGE	L GAYDOS	ARC	K C CLARKE	NCC 2-5091	6122
32	NEW YORK UNIVERSITY	J T BERGSTRAHL	HQ	C STEWART	NAGW 3675	6135
32	RENSSELAER POLY-NY	J R UNDERWOOD	HQ	M J GAFFEY	NAGW 642	6166
32	STATE UNIV NY-ALBANY	I D BROWNE	JSC	J W DELANO	NAG 9-78	6208
32	STATE UNIV NY-ALBANY	J C DODGE	HQ	J SCHWAB	NAGW 2978	6209
32	STATE UNIV NY-ALBANY	H C BRINTON	HQ	J DELANO	NAGW 3357	6211
32	STATE U NY-BINGHAMTN	R E MURPHY	HQ	S R DICKMAN	NAGW 3003	6225

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
32	STATE UNIV NY-BUFFAL	G BILLS	GSFC	BURSIK	NAG 5-2273	6237
32	STATE U NY-STONY BRK	J R UNDERWOOD	HQ	J LISSAUER	NAGW 1107	6263
32	STATE U NY-STONY BRK	J M BOYCE	HQ	J L FOX	NAGW 2238	6269
32	STATE U NY-STONY BRK	J T BERGSTRALH	HQ	J L FOX	NAGW 3731	6277
32	ST U NY COL-PLATTSBG	J BOYCE	HQ	G FLYNN	NAGW 3587	6290
32	ST U NY COL-BUFFALO	T A MAXWELL	HQ	J S KING	NAGW 2259	6293
32	VASSAR COLLEGE	BALTUCK	HQ	A S TRUPIN	NAGW 3822	6322
32	NO CAROLINA STATE U	G SOFFEN	GSFC	S COHEN	NAS 5-30698	6403
32	OHIO STATE UNIV	R H THOMAS	HQ	S L FORMAN	NAGW 2600	6700
32	UNIV OF CINCINNATI	J D RUMMEL	HQ	A MILLER	NAGW 3307	6804
32	UNIV OKLAHOMA-NORMAN	H C BRINTON	HQ	S POSTAWKO	NAGW 3031	6904
32	OREGON STATE UNIV	I D BROWNE	JSC	R A SCHMITT	NAG 9-63	6924
32	OREGON STATE UNIV	D ADAMEC	HQ	M H FREILICH	NAGW 3062	6932
32	OREGON STATE UNIV	J M BOYCE	HQ	P D KOMAR	NAGW 3217	6933
32	OREGON STATE UNIV	H C BRINTON	HQ	R A SCHMITT	NAGW 3545	6936
32	OREGON STATE UNIV	F C OWENS	HQ	M ABBOTT	NGT 00-070-193	6960
32	UNIV OREGON-EUGENE	B G BILLS	GSFC	E D HUMPHREYS	NAG 5-1903	6966
32	BUCKNELL UNIVERSITY	J M BOYCE	HQ	D J LIEN	NAGW 3377	6975
32	LAFAYETTE COLLEGE	J BOYCE	HQ	D HOGENBLOOM	NAGW 3521	7029
32	LEHIGH UNIVERSITY	H C BRINTON	HQ	J I GOLDSTEIN	NAGW 3374	7036
32	PENN STATE U-UNIV PK	B G BILLS	GSFC	K P FURLONG	NAG 5-1909	7101
32	PENN STATE U-UNIV PK	J M BOYCE	HQ	S J MACKWELL	NAGW 3372	7149
32	PENN STATE U-UNIV PK	G ASRAR	HQ	G E TUCKER	NGT 00-030-122	7177
32	UNIV OF PENNSYLVANIA	J BOYCE	HQ	R MIDDLETON	NAGW 3616	7210
32	UNIV OF PITTSBURGH	T A MAXWELL	HQ	B HAPKE	NAGW 2060	7234
32	UNIV OF PITTSBURGH	R J WILLIAMS	HQ	D CROWN	NAGW 3842	7240
32	BROWN UNIVERSITY	I D BROWNE	JSC	C M PIETERS	NAG 9-184	7267
32	BROWN UNIVERSITY	J UNDERWOOD	HQ	C M PIETERS	NAGW 28	7269
32	BROWN UNIVERSITY	J R UNDERWOOD	HQ	J W HEAD	NAGW 137	7270
32	BROWN UNIVERSITY	J R UNDERWOOD	HQ	P H SCHULTZ	NAGW 705	7271
32	BROWN UNIVERSITY	J R UNDERWOOD	HQ	J W HEAD	NAGW 713	7272
32	BROWN UNIVERSITY	J R UNDERWOOD	HQ	C M PIETERS	NAGW 748	7273
32	BROWN UNIVERSITY	J R UNDERWOOD	HQ	P H SCHULTZ	NAGW 855	7274
32	BROWN UNIVERSITY	J R UNDERWOOD	HQ	J W HEAD	NAGW 1873	7275
32	BROWN UNIVERSITY	T A MAXWELL	HQ	E M PARMENTIER	NAGW 1928	7276
32	BROWN UNIVERSITY	T A MAXWELL	HQ	J W HEAD	NAGW 2185	7277
32	BROWN UNIVERSITY	J M BOYCE	HQ	J F MUSTARD	NAGW 3379	7282
32	BROWN UNIVERSITY	J M BOYCE	HQ	L S CRUMPLER	NAGW 3412	7283
32	BROWN UNIVERSITY	J T BERGSTRALH	HQ	J C AUBELE	NAGW 3486	7285
32	BROWN UNIVERSITY	J T BERGSTRALH	HQ	P C HESS	NAGW 3488	7286
32	BROWN UNIVERSITY	RAHE	HQ	P HESS	NAGW 3613	7287
32	BROWN UNIVERSITY	J BOYCE	HQ	M RUTHERFORD	NAGW 3633	7288
32	BROWN UNIVERSITY	RAHE	HQ	C PIETERS	NAGW 3709	7289
32	BROWN UNIVERSITY	J T BERGSTRALH	HQ	J W HEAD	NAGW 3773	7291
32	BROWN UNIVERSITY	J T BERGSTRALH	HQ	A BASILEVSKY	NAGW 3803	7292
32	BROWN UNIVERSITY	F C OWENS	HQ	C M PIETERS	NGT 00-050-795	7298
32	BROWN UNIVERSITY	J ALEXANDER	HQ	M J RUTHERFORD	NGT 00-050-917	7299
32	BROWN UNIVERSITY	J ALEXANDER	HQ	M J RUTHERFORD	NGT 00-050-922	7300
32	BROWN UNIVERSITY	D HOLLAND	HQ	P H SCHULTZ	NGT 00-051-058	7303
32	BROWN UNIVERSITY	G A LESANE	HQ	P C HESS	NGT 00-051-350	7306
32	BROWN UNIVERSITY	J K ALEXANDER	HQ	P C HESS	NGT 00-070-285	7307
32	BROWN UNIVERSITY	D K RUSSELL	HQ	J HEAD	NGT 00-070-326	7308
32	BROWN UNIVERSITY	D RUSSELL	HQ	D TARGAN	NGT 00-090-234	7310
32	UNIV OF RHODE ISLAND	J BOYCE	HQ	H SUGURDSSON	NAGW 3496	7323
32	CLEMSON UNIV-CLEMSON	H C BRINTON	HQ	D D CLAYTON	NAGW 3277	7347
32	CLEMSON UNIV-CLEMSON	J BOYCE	HQ	B MEYER	NAGW 3480	7348
32	COLLEGE OF CHARLESTN	G A SOFFEN	GSFC	M W COLGAN	NAG 5-1634	7366
32	UNIV SO CAROLINA-COL	J BOYCE	HQ	J SHERVAIS	NAGW 3637	7371
32	MEMPHIS ST UNIV	M BALTUCK	HQ	M A ELLIS	NAGW 3338	7405
32	UNIV TENNESSEE-KNOXV	I D BROWNE	JSC	H Y MCSWEEN	NAG 9-58	7437

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
32	UNIV TENNESSEE-KNOXV	D S MCKAY	JSC	L A TAYLOR	NAG 9-409	7438
32	UNIV TENNESSEE-KNOXV	H C BRINTON	HQ	L TAYLOR	NAGW 3453	7444
32	UNIV TENNESSEE-KNOXV	S GOLDSTEIN	JSC	H V MCSWEEN	NGT 00-050-870	7449
32	UNIV TENNESSEE-KNOXV	S GOLDSTEIN	JSC	L A TAYLOR	NGT 00-051-052	7453
32	LAMAR UNIVERSITY	T A SULLIVAN	JSC	J L JORDAN	NAG 9-585	7498
32	LAMAR UNIVERSITY	T SULLIVAN	JSC	J L JORDAN	NAG 9-641	7504
32	SOUTHERN METHODIST U	J M BOYCE	HQ	V L HANSEN	NAGW 2915	7583
32	SUL ROSS STATE UNIV	J M BOYCE	HQ	J L STARK	NAGW 3028	7587
32	TEXAS A&M UNIVERSITY	R WILLIAMS	HQ	K H PRICE	NAGW 3963	7654
32	UNIV HOUSTON	I D BROWNE	JSC	A M REID	NAG 9-365	7717
32	UNIV HOUSTON	F HORZ	JSC	A REID	NAG 9-632	7730
32	UNIV HOUSTON	J BOYCE	HQ	A REID	NAGW 3623	7746
32	UNIV TEXAS-AUSTIN	B G BILLS	GSFC	C R WILSON	NAG 5-1929	7835
32	UNIV TEXAS-AUSTIN	B G BILLS	GSFC	R E SCHUTZ	NAG 5-1936	7836
32	UNIV TEXAS-AUSTIN	B G BILLS	GSFC	B TAPLEY	NAG 5-1939	7837
32	UNIV TEXAS-AUSTIN	R E MURPHY	HQ	B D TAPLEY	NAGW 3119	7884
32	UNIV TEXAS-AUSTIN	J T BERGSTRALH	HQ	C K SHUM	NAGW 3505	7888
32	UNIV TEXAS-AUSTIN	M BALTUCK	HQ	B TAPLEY	NAGW 4076	7895
32	UNIV TEXAS-AUSTIN	J F MCGARRY	GSFC	P J SHELUS	NAS 5-30942	7899
32	UNIV TEXAS-EL PASO	D K RUSSELL	HQ	K MARSAGLIA	NGT 00-070-350	7971
32	UNIV OF UTAH	B G BILLS	GSFC	D R CURREY	NAG 5-1822	7998
32	UNIV OF UTAH	B G BILLS	GSFC	D CURREY	NAG 5-2055	7999
32	UNIV OF VIRGINIA	J UNDERWOOD	HQ	R E JOHNSON	NAGW 186	8240
32	UNIV OF VIRGINIA	T A MAXWELL	HQ	A D HOWARD	NAGW 1926	8245
32	UNIV OF VIRGINIA	T A MAXWELL	HQ	A D HOWARD	NAGW 2282	8248
32	VIRGINIA POLY INST	R E MURPHY	HQ	J O BROWDER	NAGW 2926	8369
32	CENTRAL WASHINGTON U	G BILLS	GSFC	M RUBIN	NAG 5-2270	8415
32	CENTRAL WASHINGTON U	G BILLS	GSFC	M MILLER	NAG 5-2271	8416
32	CENTRAL WASHINGTON U	M BALTUCK	HQ	M M MILLER	NAGW 3464	8417
32	CENTRAL WASHINGTON U	M BALTUCK	HQ	C RUBIN	NAGW 3691	8418
32	CENTRAL WASHINGTON U	M BALTUCK	HQ	M MILLER	NAGW 3826	8419
32	UNIV OF WASHINGTON	L S WALTER	GSFC	A R GILLESPIE	NAG 5-1847	8444
32	UNIV OF WASHINGTON	I D BROWNE	JSC	I S MCCALLUM	NAG 9-84	8455
32	UNIV OF WASHINGTON	J R UNDERWOOD	HQ	K A HOLSAPPLE	NAGW 328	8461
32	UNIV OF WASHINGTON	J R UNDERWOOD	HQ	S G WARREN	NAGW 1734	8470
32	UNIV OF WASHINGTON	T A MAXWELL	HQ	J B ADAMS	NAGW 2275	8474
32	UNIV OF WASHINGTON	H C BRINTON	HQ	D B BROWNLEE	NAGW 3287	8493
32	UNIV OF WASHINGTON	H C BRINTON	HQ	I S MCCALLUS	NAGW 3352	8494
32	UNIV OF WASHINGTON	J S THEON	HQ	W J PLANT	NAGW 3527	8497
32	UNIV WISC-MADISON	G J JEDLOVEC	MSFC	V E SUOMI	NAG 8-974	8674
32	UNIV WISC-MADISON	M BALTUCK	HQ	W P MENZEL	NAGW 3318	8704
32	UNIV WISC-MADISON	M GOODMAN	MSFC	D L SMITH	NAS 8-38499	8735
32	UNIV OF WYOMING	T A MAXWELL	HQ	T R PARISH	NAGW 2222	8777
32	UNIV BRITISH COLUMBA	J M BOYCE	HQ	S W KIEFFER	NAGW 3792	8820
33	UNIV ALASKA-FAIRBNKS	R H THOMAS	HQ	T J WEINGARTNER	NAGW 2517	1238
33	UNIV ALASKA-FAIRBNKS	R H THOMAS	HQ	H J NIEBAUER	NAGW 2637	1241
33	UNIV ALASKA-FAIRBNKS	R A SCHIFFER	HQ	Z KOWALIK	NAGW 2972	1247
33	UNIV ALASKA-FAIRBNKS	D M BUTLER	HQ	W MASLOWSKI	NGT 00-030-088	1263
33	UNIV ALASKA-FAIRBNKS	F C OWENS	HQ	H J NIEBAUER	NGT 00-050-599	1265
33	UNIV OF ARIZONA	D E WICKLAND	HQ	P N SLATER	NAGW 3543	1489
33	CALIF INST OF TECH	D M BUTLER	HQ	S O PEHKONEN	NGT 00-030-075	1694
33	SAN DIEGO STATE UNIV	M R LEWIS	HQ	C C TREES	NAGW 2154	1783
33	SAN DIEGO STATE UNIV	C MCCLAIN	GSFC	J L MUELLER	NAS 5-31753	1786
33	SAN JOSE STATE UNIV	C MCCLAIN	GSFC	W BROENKOW	NAS 5-31746	1811
33	STANFORD UNIVERSITY	G ASRAR	HQ	J K HOLEN	NGT 00-030-014	2007
33	STANFORD UNIVERSITY	G ASRAR	HQ	R FREIFELDER	NGT 00-030-155	2011
33	UNIV CALIF-SAN DIEGO	S R LONG	GSFC	B JAEHNE	NAG 5-5025	2531
33	UNIV CALIF-SAN DIEGO	M R LEWIS	HQ	J J SIMPSON	NAGW 683	2540
33	UNIV CALIF-SAN DIEGO	B G MITCHELL	HQ	R FROUIN	NAGW 2774	2563
33	UNIV CALIF-SAN DIEGO	J S THEON	HQ	W K MELVILLE	NAGW 2946	2566

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
33	UNIV CALIF-SAN DIEGO	J C DODGE	HQ	J J SIMPSON	NAGW 2964	2567
33	UNIV CALIF-SAN DIEGO	R E MURPHY	HQ	P NIILER	NAGW 3128	2573
33	UNIV CALIF-SAN DIEGO	D E WICKLAND	HQ	R FROUIN	NAGW 3498	2578
33	UNIV CALIF-SAN DIEGO	D E WICKLAND	HQ	M VERNET	NAGW 3795	2581
33	UNIV CALIF-SAN DIEGO	C R MCCLAIN	GSFC	B G MITCHELL	NCC 5-48	2604
33	UNIV CALIF-SAN DIEGO	F C OWENS	HQ	T HAYWARD	NGT 00-050-854	2607
33	UNIV CALIF-S BARBARA	M R LEWIS	HQ	R C SMITH	NAGW 290	2635
33	UNIV CALIF-S BARBARA	R E MURPHY	HQ	D A SIEGEL	NAGW 3145	2648
33	UNIV CALIF-S BARBARA	H OSEROFF	GSFC	Z WAN	NAS 5-31370	2656
33	UNIV CALIF-S BARBARA	C R MCCLAIN	GSFC	D A SIEGEL	NCC 5-49	2662
33	UNIV CALIF-S BARBARA	G ASRAR	HQ	S A GARVER	NGT 00-030-141	2665
33	UNIV OF SOUTHERN CAL	R E MURPHY	HQ	R C DUGDALE	NAGW 3149	2736
33	UNIV OF SOUTHERN CAL	D E WICKLAND	HQ	D A KIEFER	NAGW 3574	2740
33	UNIV OF SOUTHERN CAL	D E WICKLAND	HQ	R ITURRIAGA	NAGW 3763	2742
33	UNIV OF SOUTHERN CAL	A C JANETOS	HQ	T D DICKEY	NAGW 3949	2744
33	UNIV OF SOUTHERN CAL	G ASRAR	HQ	R M KUDELA	NGT 00-030-108	2751
33	UNIV COLORADO-BOLDR	S J KZETZBERG	LARC	G H BORN	NAG 1-1491	2819
33	UNIV COLORADO-BOLDR	S J KATZBERG	LARC	G H BORN	NAG 1-1506	2820
33	UNIV COLORADO-BOLDR	R H THOMAS	HQ	R G BARRY	NAGW 641	2933
33	UNIV COLORADO-BOLDR	G S LAGERLOEF	HQ	W J EMERY	NAGW 1110	2938
33	UNIV COLORADO-BOLDR	G S LAGERLOEF	HQ	G BORN	NAGW 1124	2939
33	UNIV COLORADO-BOLDR	R H THOMAS	HQ	J MASLANIK	NAGW 1786	2946
33	UNIV COLORADO-BOLDR	R H THOMAS	HQ	K STEFFEN	NAGW 2158	2957
33	UNIV COLORADO-BOLDR	R A SCHIFFER	HQ	W EMERY	NAGW 2948	2982
33	UNIV COLORADO-BOLDR	M E MAIDEN	HQ	R ARMSTRONG	NAGW 3261	2998
33	UNIV COLORADO-BOLDR	M E MAIDEN	HQ	R ARMSTRONG	NAGW 3768	3013
33	UNIV COLORADO-BOLDR	G ASRAR	HQ	M J MILLS	NGT 00-030-131	3057
33	UNIV COLORADO-BOLDR	G ASRAR	HQ	A M MIDDLEBROOK	NGT 00-030-132	3058
33	UNIV COLORADO-BOLDR	J ALEXANDER	HQ	W HAY	NGT 00-050-915	3084
33	UNIV COLORADO-BOLDR	D K RUSSELL	HQ	R D CULP	NGT 00-070-389	3113
33	UNIV COLORADO-BOLDR	G ASRAR	HQ	M F COCHRAN	NGT 00-030-143	3169
33	YALE UNIVERSITY	G S LAGERLOEF	HQ	F WEBSTER	NAGW 1674	3191
33	UNIV OF DELAWARE	J S THEON	HQ	X H YAN	NAGW 2953	3195
33	UNIV OF DELAWARE	G S LAGERLOEF	HQ	J J O'BRIEN	NAGW 985	3348
33	FLORIDA STATE UNIV	M J KURYLO	HQ	J P CHANTON	NAGW 1823	3350
33	FLORIDA STATE UNIV	R E MURPHY	HQ	R IVERSON	NAGW 3495	3356
33	FLORIDA STATE UNIV	D M BUTLER	HQ	C A JONES	NGT 00-030-056	3360
33	FLORIDA STATE UNIV	G ASRAR	HQ	J CHANTON	NGT 00-030-170	3361
33	FLORIDA STATE UNIV	F C OWENS	HQ	J J O'BRIEN	NGT 00-050-653	3363
33	FLORIDA STATE UNIV	M R LEWIS	HQ	O BROWN	NAGW 273	3461
33	UNIV OF MIAMI	M R LEWIS	HQ	P A MATRAL	NAGW 1845	3462
33	UNIV OF MIAMI	M LEWIS	HQ	R A FINE	NAGW 2073	3463
33	UNIV OF MIAMI	M R LEWIS	HQ	W M BALCH	NAGW 2426	3464
33	UNIV OF MIAMI	R E MURPHY	HQ	D OLSEN	NAGW 3619	3467
33	UNIV OF MIAMI	A C JANETOS	HQ	P A MATRAI	NAGW 3765	3468
33	UNIV OF MIAMI	M E MAIDEN	HQ	R H EVANS	NAGW 3775	3469
33	UNIV OF MIAMI	H OSEROFF	GSFC	O B BROWN	NAS 5-31361	3471
33	UNIV OF MIAMI	G FELDMAN	GSFC	R EVANS	NAS 5-31745	3475
33	UNIV OF MIAMI	G ASRAR	HQ	M C FORBES	NGT 00-030-026	3477
33	UNIV OF MIAMI	G ASRAR	HQ	S A YVON	NGT 00-030-114	3478
33	UNIV OF MIAMI	M R LEWIS	HQ	K L CARDER	NAGW 465	3484
33	UNIV OF SO FLORIDA	R E MURPHY	HQ	J L WALSH	NAGW 3459	3486
33	UNIV OF SO FLORIDA	D E WICKLAND	HQ	F MULLER-KARGER	NAGW 3483	3487
33	UNIV OF SO FLORIDA	R E MURPHY	HQ	M E LUTHER	NAGW 3618	3488
33	UNIV OF SO FLORIDA	A C JENETOS	HQ	P G COBLE	NAGW 3950	3489
33	UNIV OF SO FLORIDA	C R MCCLAIN	GSFC	K L CARDER	NCC 5-50	3495
33	UNIV OF SO FLORIDA	A JOYCE	SSC	F M KARGER	NGT 00-070-260	3498
33	UNIV OF SO FLORIDA	D E WICKLAND	HQ	R BIDIGARE	NAGW 3493	3719
33	UNIV OF HAWAII-MANOA	D M BUTLER	HQ	J N PORTER	NGT 00-030-041	3747
33	UNIV OF KANSAS	R H THOMAS	HQ	C TSATSOU LIS	NAGW 3043	4257

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
33	SO UNIV & A&M COL-BR	A JOYCE	SSC	B A MCKEE	NGT 00-051-197	4354
33	UNIV OF MAINE-ORONO	J S THEON	HQ	V PANCHANG	NAGW 4075	4384
33	U OF MD CEN EN ES ST	C R MCCLAIN	GSFC	H W DUCKLOW	NAG 5-2267	4391
33	U OF MD CEN EN ES ST	A C JANETOS	HQ	L W HARDING	NAGW 3891	4392
33	U OF MD CEN EN ES ST	A C JANETOS	HQ	T R FISHER	NAGW 3947	4393
33	UNIV MARYLAND-COL PK	M M RIENECKER	GSFC	J A CARTON	NAG 5-2361	4593
33	UNIV MARYLAND-COL PK	M LEWIS	HQ	C F D'ELIA	NAGW 2202	4633
33	UNIV MARYLAND-COL PK	D ADAMEC	HQ	J A CARTON	NAGW 3086	4650
33	UNIV MARYLAND-COL PK	W J WAGNER	HQ	M J ASEHWANDEN	NAGW 3456	4657
33	UNIV MARYLAND-COL PK	M BURRELL	GSFC	L W HARDING	NGT 00-051-181	4720
33	HARVARD UNIVERSITY	D M BUTLER	HQ	T TOOLAN	NGT 00-030-071	4833
33	HARVARD UNIVERSITY	F C OWENS	HQ	J BLOXHAM	NGT 00-050-615	4840
33	MASS INST OF TECH	J G RICHMAN	HQ	C WUNSCH	NAGW 1048	4977
33	MASS INST OF TECH	G S LAGERLOEF	HQ	W K MELVILLE	NAGW 1272	4978
33	MASS INST OF TECH	G ASRAR	HQ	N M MAHOWALD	NGT 00-030-109	5069
33	UNIV OF MASS-AMHERST	R H THOMAS	HQ	C T SWIFT	NAGW 559	5112
33	UNIV OF MASS-AMHERST	G S LAGERLOEF	HQ	R E MCINTOSH	NAGW 1112	5113
33	WOODSHOLE OCEAN INST	G S LAGERLOEF	HQ	K A KELLY	NAGW 1666	5141
33	WOODSHOLE OCEAN INST	B MITCHELL	HQ	P G BREWER	NAGW 2431	5142
33	WOODSHOLE OCEAN INST	R MURPHY	HQ	D M GLOVER	NAGW 3648	5144
33	WOODSHOLE OCEAN INST	G ASRAR	HQ	H L BRYDEN	NGT 00-030-006	5145
33	WOODSHOLE OCEAN INST	G ASRAR	HQ	C MAURITZEN	NGT 00-030-096	5146
33	UNIV MICH-ANN ARBOR	D HOLLAND	HQ	L KILLEEN	NGT 00-051-137	5340
33	UNIV NEBRASKA-LINCLN	R H THOMAS	HQ	M R ANDERSON	NAGW 1266	5592
33	UNIV NEW HAMP-DURHAM	R E MURPHY	HQ	J W CAMPBELL	NAGW 3720	5696
33	PRINCETON UNIVERSITY	R H THOMAS	HQ	M J PHELAN	NAGW 1763	5755
33	PRINCETON UNIVERSITY	R E MURPHY	HQ	J SARMIENTO	NAGW 3137	5764
33	PRINCETON UNIVERSITY	A C JANETOS	HQ	S W PASCALA	NGT 00-030-264	5776
33	CITY U OF NY CTY COL	G S LAGERLOEF	HQ	W J PIERSON	NAGW 690	5902
33	COLUMBIA UNIVERSITY	A J BUSALACCHI	GSFC	E J KATZ	NAG 5-2058	5946
33	COLUMBIA UNIVERSITY	G S LAGERLOEF	HQ	M A CANE	NAGW 916	5959
33	COLUMBIA UNIVERSITY	R H THOMAS	HQ	S S JACOBS	NAGW 1344	5960
33	COLUMBIA UNIVERSITY	R H THOMAS	HQ	A L GORDON	NAGW 1752	5963
33	COLUMBIA UNIVERSITY	R H THOMAS	HQ	D G MARTINSON	NAGW 1844	5964
33	COLUMBIA UNIVERSITY	M R LEWIS	HQ	J K BISHOP	NAGW 2189	5969
33	COLUMBIA UNIVERSITY	R H THOMAS	HQ	D L MARTINSON	NAGW 2599	5975
33	COLUMBIA UNIVERSITY	R H THOMAS	HQ	S S JACOBS	NAGW 3362	5980
33	COLUMBIA UNIVERSITY	G ASRAR	HQ	G BOND	NGT 00-030-186	6000
33	COLUMBIA UNIVERSITY	G ASRAR	HQ	A L GORDON	NGT 00-030-217	6001
33	HOFSTRA UNIVERSITY	G S LAGERLOEF	HQ	D E WEISSMAN	NAGW 468	6121
33	STATE U NY-STONY BRK	G ASRAR	HQ	A SUBRAMANIAM	NGT 00-030-121	6287
33	DUKE UNIVERSITY	R E MURPHY	HQ	R BARBER	NAGW 3655	6335
33	NO CAROLINA STATE U	D E WICKLAND	HQ	D KAMYKOWSKI	NAGW 3575	6399
33	OHIO STATE UNIV	R H THOMAS	HQ	K C JEZEK	NAGW 2035	6699
33	OREGON STATE UNIV	G S LAGERLOEF	HQ	D B CHELTON	NAGW 1883	6925
33	OREGON STATE UNIV	B G MITCHELL	HQ	M R ABBOTT	NAGW 2454	6927
33	OREGON STATE UNIV	D ADAMEO	HQ	A F BENNETT	NAGW 2715	6930
33	OREGON STATE UNIV	J S THEON	HQ	M H FREILICH	NAGW 3305	6934
33	OREGON STATE UNIV	D ADAMEC	HQ	D B CHILTON	NAGW 3510	6935
33	OREGON STATE UNIV	D E WICKLAND	HQ	R ZANEVELD	NAGW 3580	6937
33	OREGON STATE UNIV	R SMITH	HQ	L WEBER	NAGW 3683	6939
33	OREGON STATE UNIV	A C JANETOS	HQ	E B SHERR	NAGW 3737	6941
33	OREGON STATE UNIV	J S THEON	HQ	C PADEO	NAGW 4104	6944
33	OREGON STATE UNIV	H OSEROFF	GSFC	M R ABBOTT	NAS 5-31360	6947
33	OREGON STATE UNIV	G ASRAR	HQ	M L DICKSON	NGT 00-030-029	6949
33	OREGON STATE UNIV	G ASRAR	HQ	F D ZARON	NGT 00-030-037	6950
33	OREGON STATE UNIV	D M BUTLER	HQ	A H BARNARD	NGT 00-030-066	6951
33	OREGON STATE UNIV	G ASRAR	HQ	B SHERR	NGT 00-030-188	6952
33	OREGON STATE UNIV	R A SCHIFFER	HQ	M FREILICH	NGT 00-030-263	6954
33	OREGON STATE UNIV	F C OWENS	HQ	J G RICHMAN	NGT 00-050-624	6957

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
33	PENN STATE U-UNIV PK	G ASRAR	HQ	J H MATHER	NGT 00-030-120	7176
33	UNIV OF RHODE ISLAND	M R LEWIS	HQ	J A YODER	NAGW 1891	7317
33	UNIV OF RHODE ISLAND	G HUNOLT	HQ	P CORNILLON	NAGW 2560	7318
33	UNIV OF RHODE ISLAND	D ADAMEC	HQ	P C CORNILLON	NAGW 3009	7320
33	UNIV OF RHODE ISLAND	D ADAMEC	HQ	P C CORNILLON	NAGW 3133	7322
33	UNIV OF RHODE ISLAND	R E MURPHY	HQ	P STEGMAN	NAGW 3601	7324
33	UNIV OF RHODE ISLAND	D ADAMEC	HQ	P C CORNILLON	NAGW 3784	7326
33	UNIV TENNESSEE-KNOXV	D E WICKLAND	HQ	G COTA	NAGW 3578	7445
33	RICE UNIVERSITY	D M BUTLER	HQ	S CHU	NGT 00-030-072	7562
33	RICE UNIVERSITY	D M BUTLER	HQ	G A HADDAD	NGT 00-030-074	7563
33	TEXAS A&M UNIVERSITY	G S LAGERLOEF	HQ	R H STEWART	NAGW 1836	7645
33	TEXAS A&M UNIVERSITY	G S LAGERLOEF	HQ	R H STEWART	NAGW 1979	7646
33	TEXAS A&M UNIVERSITY	J A KAYE	HQ	N W TINDALE	NAGW 3652	7653
33	TEXAS A&M UNIVERSITY	R A SCHIFFER	HQ	R H STEWART	NGT 00-030-243	7665
33	UNIV TEXAS-AUSTIN	G S LAGERLOEF	HQ	B TAPLEY	NAGW 2132	7868
33	BRIGHAM YOUNG UNIV	J K ALEXANDER	HQ	D G LONG	NAGW 2875	7989
33	BRIGHAM YOUNG UNIV	G ASRAR	HQ	D LONG	NGT 00-030-198	7991
33	OLD DOMINION UNIV	C R MCCLAIN	GSFC	E E HOFMANN	NAG 5-1401	8167
33	OLD DOMINION UNIV	R E MURPHY	HQ	E HOFMANN	NAGW 3550	8169
33	OLD DOMINION UNIV	M E MAIDEN	HQ	E SMITH	NAGW 3981	8170
33	UNIV OF WASHINGTON	R H THOMAS	HQ	D P WINEBRENNER	NAGW 1256	8465
33	UNIV OF WASHINGTON	G S LAGERLOEF	HQ	K B KATSAROS	NAGW 1322	8466
33	UNIV OF WASHINGTON	R H THOMAS	HQ	S MARTIN	NAGW 1436	8467
33	UNIV OF WASHINGTON	R H THOMAS	HQ	D A ROTHROCK	NAGW 2407	8475
33	UNIV OF WASHINGTON	R H THOMAS	HQ	R COLONY	NAGW 2512	8476
33	UNIV OF WASHINGTON	R H THOMAS	HQ	D A ROTHROCK	NAGW 2513	8477
33	UNIV OF WASHINGTON	R H THOMAS	HQ	T C GRENFELL	NAGW 2574	8482
33	UNIV OF WASHINGTON	J S THEON	HQ	A T JESSUP	NAGW 2888	8487
33	UNIV OF WASHINGTON	R H THOMAS	HQ	K AAGAARD	NAGW 3174	8490
33	UNIV OF WASHINGTON	R E MURPHY	HQ	K BANSE	NAGW 3606	8499
33	UNIV OF WASHINGTON	G ASRAR	HQ	L L LANDRUM	NGT 00-030-020	8528
33	UNIV OF WASHINGTON	G ASRAR	HQ	J E MUENCH	NGT 00-030-035	8530
33	UNIV OF WASHINGTON	D M BUTLER	HQ	J L YOUNG	NGT 00-030-058	8533
33	UNIV OF WASHINGTON	D M BUTLER	HQ	C J BEEGLE	NGT 00-030-085	8535
33	UNIV OF WASHINGTON	D M BUTLER	HQ	N J MANTUA	NGT 00-030-087	8536
33	UNIV OF WASHINGTON	F C OWENS	HQ	K BANSE	NGT 00-050-616	8546
33	UNIV OF WASHINGTON	F C OWENS	HQ	M J PERRY	NGT 00-050-681	8548
33	UNIV OF WASHINGTON	A NOVOTNY	HQ	M J PERRY	NGT 00-051-225	8558
33	UNIV WISC-MADISON	R H THOMAS	HQ	C R BENTLEY	NAGW 1773	8683
33	U PUERTO RICO-MAYAGZ	J C DODGE	HQ	J M DIAZ	NAGW 2912	8790
33	U PUERTO RICO-MAYAGZ	A C JANETOS	HQ	J E CORREDOR	NAGW 3926	8791
33	U PUERTO RICO-MAYAGZ	F C OWENS	HQ	J M LOPEZ	NGT 00-070-195	8798
33	U PUERTO RICO-MAYAGZ	F C OWENS	HQ	J M LOPEZ	NGT 00-070-209	8799
33	U PUERTO RICO-MAYAGZ	J T LYNCH	HQ	J M LOPEZ	NGT 00-070-238	8800
33	U PUERTO RICO-MAYAGZ	A JOYCE	SSC	J M LOPEZ	NGT 00-070-259	8801
33	U PUERTO RICO-MAYAGZ	D K RUSSELL	HQ	R VASQUEZ	NGT 00-070-311	8802
33	U PUERTO RICO-MAYAGZ	D K RUSSELL	HQ	J M LOPEZ	NGT 00-070-319	8803
33	U PUERTO RICO-MAYAGZ	D K RUSSELL	HQ	J M LOPEZ	NGT 00-070-320	8804
33	U PUERTO RICO-MAYAGZ	D K RUSSELL	HQ	J M LOPEZ	NGT 00-070-323	8806
39	AUBURN UNIV-AUBURN	J L JONES	LARC	M F ROSE	NAG 1-1329	1018
39	SELMA UNIVERSITY	R M TRUNZO	JPL	K D CHAPATWALA	NAGW 3969	1051
39	UNIV ALA-HUNTSVILLE	M E MAIDEN	HQ	M E BOTTS	NAGW 3674	1143
39	UNIV ALA-HUNTSVILLE	R P CHASSAY	MSFC	R J NAUMANN	NAS 8-38773	1156
39	UNIV ALASKA-ANCHORAG	D K HALL	GSFC	K M PETERSON	NAG 5-2074	1221
39	UNIV ALASKA-FAIRBNKS	D K HALL	GSFC	M O JEFFRIES	NAG 5-1731	1228
39	UNIV ALASKA-FAIRBNKS	R H THOMAS	HQ	D L KANE	NAGW 2519	1239
39	UNIV ALASKA-FAIRBNKS	R H THOMAS	HQ	C LINGLE	NAGW 2614	1240
39	UNIV ALASKA-FAIRBNKS	R A SCHIFFER	HQ	W WEEKS	NAGW 2716	1242
39	UNIV ALASKA-FAIRBNKS	R A SCHIFFER	HQ	C S LINGLE	NAGW 2827	1244
39	UNIV ALASKA-FAIRBNKS	R A SCHIFFER	HQ	G WELLER	NAGW 2829	1245

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
39	UNIV ALASKA-FAIRBNKS	R H THOMAS	HQ	W D HARRISON	NAGW 3727	1252
39	UNIV ALASKA-FAIRBNKS	G HUNOLT	GSFC	G WELLER	NAS 5-32393	1257
39	UNIV ALASKA-FAIRBNKS	D HALL	GSFC	C BENSON	NCC 5-75	1261
39	UNIV ALASKA-FAIRBNKS	D M BUTLER	HQ	E BREITENBERGER	NGT 00-030-039	1262
39	ARIZONA STATE UNIV	H BLODGET	GSFC	P CHRISTENSEN	NAS 5-31371	1326
39	NORTHERN ARIZONA U	B GUENTHER	GSFC	R L WILDEY	NAG 5-2159	1339
39	UNIV OF ARIZONA	F G HALL	GSFC	R E DICKINSON	NAG 5-2310	1386
39	UNIV OF ARIZONA	B MARKHAM	GSFC	P SLATER	NAG 5-2448	1393
39	UNIV OF ARIZONA	G ASRAR	HQ	S SOROOSHIAN	NAGW 2425	1453
39	UNIV OF ARIZONA	R E MURPHY	HQ	W J SHUTTLEWORTH	NAGW 3368	1478
39	UNIV OF ARIZONA	D E WICKLAND	HQ	A R HUETE	NAGW 3555	1490
39	UNIV OF ARIZONA	D M BUTLER	HQ	X GAO	NGT 00-030-045	1531
39	UNIV OF ARIZONA	G ASRAR	HQ	P R HOUSER	NGT 00-030-136	1532
39	UNIV OF ARIZONA	G ASRAR	HQ	J RANGER-MOORE	NGT 00-030-181	1534
39	CALIF INST OF TECH	D E WICKLAND	HQ	M E LIDSTROM	NAGW 3780	1679
39	CAL STATE U-CHICO	J SALUTE	ARC	M BALDY	NCC 2-5062	1747
39	CAL STATE U-L ANGLES	D E WICKLAND	HQ	J A GAMON	NAGW 3707	1753
39	SAN DIEGO STATE UNIV	B CHOUDHURY	GSFC	A S HOPE	NAG 5-911	1780
39	SAN DIEGO STATE UNIV	G ASRAR	HQ	J FRANKLIN	NAGW 2031	1782
39	SAN DIEGO STATE UNIV	D E WICKLAND	HQ	J L MUELLER	NAGW 3494	1784
39	SAN DIEGO STATE UNIV	G ASRAR	HQ	P W LEADLEY	NGT 00-030-134	1788
39	STANFORD UNIVERSITY	M L IMHOFF	GSFC	P EHRlich	NAG 5-2393	1908
39	STANFORD UNIVERSITY	A C JANETOS	HQ	P M VITOUSEK	NAGW 3049	1934
39	STANFORD UNIVERSITY	P B RUSSELL	ARC	W G ERNST	NCA 2-768	1964
39	STANFORD UNIVERSITY	D M BUTLER	HQ	A R TOWNSEND	NGT 00-030-051	2008
39	STANFORD UNIVERSITY	D M BUTLER	HQ	M G BAC	NGT 00-030-078	2009
39	STANFORD UNIVERSITY	G ASRAR	HQ	V S INAN	NGT 00-030-156	2012
39	UNIV CALIF-BERKELEY	J M DAVIS	MSFC	R P LIN	NAG 8-830	2108
39	UNIV CALIF-BERKELEY	D E WICKLAND	HQ	F S CHAPIN III	NAGW 3769	2150
39	UNIV CALIF-BERKELEY	D E WICKLAND	HQ	P A MATSON	NAGW 3869	2157
39	UNIV CALIF-BERKELEY	G ASRAR	HQ	A P KINZIG	NGT 00-030-025	2196
39	UNIV CALIF-BERKELEY	D M BUTLER	HQ	M S TORN	NGT 00-030-048	2197
39	UNIV CALIF-BERKELEY	D M BUTLER	HQ	S P ANDERSON	NGT 00-030-083	2198
39	UNIV CALIF-BERKELEY	G ASRAR	HQ	S E HOBBIE	NGT 00-030-154	2201
39	UNIV CALIF-BERKELEY	G ASRAR	HQ	M E POWER	NGT 00-030-165	2202
39	UNIV CALIF-BERKELEY	A C JANETOS	HQ	P A MATSON	NGT 00-030-260	2205
39	UNIV CALIF-DAVIS	R H THOMAS	HQ	S USTIN	NAGW 2636	2256
39	UNIV CALIF-DAVIS	J SALUTE	ARC	J GRANETT	NCC 2-5046	2286
39	UNIV CALIF-DAVIS	G ASRAR	HQ	T W FAN	NGT 00-030-167	2298
39	UNIV CALIF-IRVINE	L WALTER	GSFC	S TRUMBORE	NAG 5-1840	2314
39	UNIV CALIF-IRVINE	F G HALL	GSFC	S TRUMBORE	NAG 5-2306	2317
39	UNIV CALIF-IRVINE	A C JANETOS	HQ	F S ROWLAND	NAGW 2738	2325
39	UNIV CALIF-IRVINE	A C JANETOS	HQ	S TRUMBORE	NAGW 2748	2326
39	UNIV CALIF-IRVINE	A C JANETOS	HQ	W S REEBURGH	NAGW 3053	2328
39	UNIV CALIF-IRVINE	D M BUTLER	HQ	M B DECKER	NGT 00-030-067	2333
39	UNIV CALIF-L ANGELES	J D RUMMEL	HQ	J F KERRIDGE	NAGW 3725	2450
39	UNIV CALIF-L ANGELES	G ASRAR	HQ	S M ANDERSON	NGT 00-030-148	2477
39	UNIV CALIF-SAN DIEGO	A C JANETOS	HQ	R J FROUIN	NAGW 2727	2561
39	UNIV CALIF-SAN DIEGO	R SCHIFFER	HQ	U HERZFELD	NAGW 2746	2562
39	UNIV CALIF-SAN DIEGO	R E MURPHY	HQ	C D KEELING	NAGW 2987	2570
39	UNIV CALIF-SAN DIEGO	G SOFFEN	GSFC	J B MINSTER	NAS 5-33019	2590
39	UNIV CALIF-S BARBARA	B CHOUDHURY	GSFC	J DOZIER	NAG 5-917	2632
39	UNIV CALIF-S BARBARA	M GOODMAN	MSFC	J E ESTES	NAG 8-929	2634
39	UNIV CALIF-S BARBARA	J C DODGE	HQ	C GAUTIER	NAGW 2458	2642
39	UNIV CALIF-S BARBARA	G ASRAR	HQ	J DOZIER	NAGW 2602	2644
39	UNIV CALIF-S BARBARA	A C JANETOS	HQ	J MELACK	NAGW 2724	2645
39	UNIV CALIF-S BARBARA	E KRIENS	GSFC	C GAUTIER	NAS 5-31374	2657
39	UNIV CALIF-S BARBARA	G ASRAR	HQ	S K HAMILTON	NGT 00-030-013	2663
39	UNIV CALIF-S BARBARA	G ASRAR	HQ	A GERSHUNOV	NGT 00-030-145	2666
39	UNIV CALIF-S BARBARA	G ASRAR	HQ	H COUCLELIS	NGT 00-030-204	2668

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
39	COLORADO STATE UNIV	F G HALL	GSFC	R A PIELKE	NAG 5-2078	2776
39	COLORADO STATE UNIV	F G HALL	GSFC	R A PIELKE	NAG 5-2302	2777
39	COLORADO STATE UNIV	R E MURPHY	HQ	D S SCHIMEL	NAGW 2662	2785
39	COLORADO STATE UNIV	G ASRAR	HQ	V B BROWN	NGT 00-030-144	2798
39	COLORADO STATE UNIV	G ASRAR	HQ	R H JOHNSON	NGT 00-030-190	2801
39	UNIV COLORADO-BOLDR	H K RAMAPRIYAN	GSFC	W EMERY	NAG 5-1715	2862
39	UNIV COLORADO-BOLDR	F G HALL	GSFC	R K MONSON	NAG 5-2287	2887
39	UNIV COLORADO-BOLDR	R H THOMAS	HQ	R G BARRY	NAGW 1839	2947
39	UNIV COLORADO-BOLDR	N B DOUGLAS	HQ	J WAHR	NAGW 1843	2948
39	UNIV COLORADO-BOLDR	R H THOMAS	HQ	R G BARRY	NAGW 2598	2968
39	UNIV COLORADO-BOLDR	R A SCHIFFER	HQ	U RADOK	NAGW 2706	2972
39	UNIV COLORADO-BOLDR	G ASRAR	HQ	V K GUPTA	NAGW 2731	2973
39	UNIV COLORADO-BOLDR	M M MAIDEN	HQ	W EMERY	NAGW 3224	2997
39	UNIV COLORADO-BOLDR	R H THOMAS	HQ	J KEY	NAGW 3437	3003
39	UNIV COLORADO-BOLDR	R H THOMAS	HQ	U C HERZFELD	NAGW 3790	3014
39	UNIV COLORADO-BOLDR	G ASRAR	HQ	S D PECKHAM	NGT 00-030-023	3052
39	UNIV COLORADO-BOLDR	D BUTLER	HQ	T SEASTEDT	NGT 00-030-095	3054
39	UNIV COLORADO-BOLDR	G ASRAR	HQ	A ALAM	NGT 00-030-097	3055
39	UNIV COLORADO-BOLDR	G ASRAR	HQ	R VILLALBA	NGT 00-030-133	3059
39	UNIV COLORADO-BOLDR	G ASRAR	HQ	R J GOSNELL	NGT 00-030-139	3060
39	UNIV COLORADO-BOLDR	G ASRAR	HQ	G H BORN	NGT 00-030-207	3065
39	UNIV COLORADO-BOLDR	G ASRAR	HQ	R K MONSON	NGT 00-030-210	3066
39	UNIV OF DENVER	C P RINSLAND	LARC	D G MURCRAY	NSG-1432	3133
39	UNIV OF CONNECTICUT	A C JANETOS	HQ	J SILANDER	NGT 00-030-240	3146
39	YALE UNIVERSITY	G ASRAR	HQ	C G WRAY	NGT 00-030-118	3168
39	UNIV OF DELAWARE	D E WICKLAND	HQ	C J WILLMOTT	NAGW 1884	3192
39	UNIV OF DELAWARE	G ASRAR	HQ	J SONG	NGT 00-030-126	3200
39	GEORGE WASHINGTON U	J A WEINMAN	GSFC	N M KHADR	NAG 5-1807	3216
39	GEORGE WASHINGTON U	P W BACKLUMD	HQ	J M LOGSDON	NAGW 4050	3221
39	GEORGE WASHINGTON U	F G HALL	GSFC	R LANG	NCC 5-53	3230
39	FLORIDA STATE UNIV	F G HALL	GSFC	E A SMITH	NAG 5-2072	3339
39	FLORIDA STATE UNIV	F G HALL	GSFC	E A SMITH	NAG 5-2447	3340
39	FLORIDA STATE UNIV	D E WICKLAND	HQ	J CHANTON	NAGW 3855	3357
39	UNIV OF FLORIDA	R E MURPHY	HQ	C S HOLLING	NAGW 2524	3422
39	UNIV OF FLORIDA	D E WICKLAND	HQ	C S HOLLING	NAGW 3698	3427
39	UNIV OF MIAMI	H K RAMAPRIYAN	GSFC	R H EVANS	NAG 5-1788	3456
39	UNIV OF GEORGIA	D K RUSSELL	HQ	R HODSON	NGT 00-070-345	3652
39	UNIV OF HAWAII-MANOA	F HASLER	GSFC	P J MOUGINIS-MARK	NAG 5-2695	3677
39	UNIV OF HAWAII-MANOA	M BALTUCK	HQ	P MOUGINIS-MARK	NAGW 2468	3703
39	UNIV OF HAWAII-MANOA	D M BUTLER	HQ	D M ISHII	NAGW 3812	3729
39	UNIV OF HAWAII-MANOA	W LAU	GSFC	R LUKAS	NAS 5-31722	3743
39	NORTHWESTERN UNIV	R H THOMAS	HQ	G E BIRCHFIELD	NAGW 2695	3805
39	UNIV OF CHICAGO	R H THOMAS	HQ	D MACAYEAL	NAGW 2588	3879
39	UNIV ILLINOIS-URBANA	H J ZWALLY	GSFC	J W WALSH	NAG 5-1295	3958
39	INDIANA U-BLOOMINGTN	A C JANETOS	HQ	E E MORAN	NGT 00-030-248	4032
39	PURDUE UNIVERSITY	A J TUYAHOV	HQ	C J JOHANNSEN	NAGW 925	4076
39	PURDUE UNIVERSITY	W HUNTRESS	HQ	C J JOHANNSEN	NAGW 1472	4077
39	PURDUE UNIVERSITY	D E WICKLAND	HQ	D LANDGREBE	NAGW 3924	4086
39	PURDUE UNIVERSITY	V C VANDERBILT	ARC	L L BIEHL	NCC 2-5038	4094
39	UNIV OF NOTRE DAME	A C JANETOS	HQ	R G CARLTON	NGT 00-030-250	4139
39	IOWA STATE UNIV	G ASRAR	HQ	R W TURNER	NGT 00-030-008	4172
39	UNIV OF IOWA	G ASRAR	HQ	W F KRAJEWSKI	NGT 00-030-160	4230
39	UNIV OF KANSAS	F G HALL	GSFC	S P GOGINENI	NAG 5-2344	4250
39	UNIV OF KANSAS	F G HALL	GSFC	P M RICH	NAG 5-2358	4251
39	UNIV OF KANSAS	R H THOMAS	HQ	S COGINENI	NAGW 3346	4258
39	UNIV OF KANSAS	R H THOMAS	HQ	S P GOGINENI	NAGW 3700	4260
39	UNIV OF KANSAS	A J TUYAHOV	HQ	K P PRICE	NAGW 3810	4261
39	UNIV OF KANSAS	D M BUTLER	HQ	M E JAKUBAUSKAS	NGT 00-030-062	4268
39	UNIV OF KANSAS	G ASRAR	HQ	C TSATSOU LIS	NGT 00-030-189	4270
39	LA ST U&A&M COL-BRGE	G LASANE	HQ	H H ROBERTS	NAGW 1552	4319

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
39	LA ST U&A&M COL-BRGE	G ASRAR	HQ	K G HENDERSON	NGT 00-030-183	4333
39	SOUTHEASTERN LA UNIV	W M KNOTT	KSC	R A SEIGEL	NAG10-131	4347
39	TULANE UNIVERSITY	J S THEON	HQ	R G WATTS	NGT 00-030-262	4366
39	UNIV OF MAINE-ORONO	F G HALL	GSFC	S M GOLTZ	NAG 5-2590	4381
39	UNIV OF MAINE-ORONO	M M AVERNER	HQ	G M KING	NAGW 2780	4382
39	UNIV OF MAINE-ORONO	D E WICKLAND	HQ	G M KING	NAGW 3746	4383
39	JOHNS HOPKINS UNIV	E HALL	GSFC	J KOU	NAG 5-2128	4423
39	LOYOLA COLLEGE	G ASRAR	HQ	G FEELEY-HARNIK	NGT 00-030-209	4500
39	UNIV MARYLAND-BALT	E R KREINS	GSFC	L L STROW	NAS 5-31378	4517
39	UNIV MARYLAND-COL PK	C J TUCKER	GSFC	C O JUSTICE	NAG 5-942	4554
39	UNIV MARYLAND-COL PK	B N HOLBEN	GSFC	S D PRINCE	NAG 5-1471	4564
39	UNIV MARYLAND-COL PK	A J KRUEGER	GSFC	C C SCHNETZLER	NAG 5-1971	4577
39	UNIV MARYLAND-COL PK	F HALL	GSFC	R D HUDSON	NAG 5-2117	4584
39	UNIV MARYLAND-COL PK	F G HALL	GSFC	S N GOWARD	NAG 5-2293	4586
39	UNIV MARYLAND-COL PK	F G HALL	GSFC	C L WALTHALL	NAG 5-2308	4588
39	UNIV MARYLAND-COL PK	E MIDDLETON	GSFC	J SULLIVAN	NAG 5-2339	4589
39	UNIV MARYLAND-COL PK	D WILLIAMS	GSFC	J TOWNSHEND	NAG 5-2370	4595
39	UNIV MARYLAND-COL PK	K J RANSON	GSFC	J TOWNSHEND	NAG 5-2396	4599
39	UNIV MARYLAND-COL PK	D E WICKLAND	HQ	S N GOWARD	NAGW 1152	4617
39	UNIV MARYLAND-COL PK	G ASRAR	HQ	P SELLERS	NAGW 1269	4618
39	UNIV MARYLAND-COL PK	G ASRAR	HQ	S D PRINCE	NAGW 1967	4627
39	UNIV MARYLAND-COL PK	R H WARING	HQ	J R TOWNSHEND	NAGW 2723	4641
39	UNIV MARYLAND-COL PK	D E WICKLAND	HQ	C L WALTHALL	NAGW 3193	4652
39	UNIV MARYLAND-COL PK	M F MAIDEN	HQ	J R TOWNSHEND	NAGW 3226	4654
39	UNIV MARYLAND-COL PK	M E MAIDEN	HQ	J TOWNSHEND	NAGW 3235	4655
39	UNIV MARYLAND-COL PK	D M BUTLER	HQ	J TOWNSHEND	NAGW 3758	4666
39	UNIV MARYLAND-COL PK	M E MAIDEN	HQ	J R TOWNSHEND	NAGW 3771	4667
39	UNIV MARYLAND-COL PK	H OSEROFF	GSFC	C JUSTICE	NAS 5-31365	4680
39	UNIV MARYLAND-COL PK	D M BUTLER	HQ	D O FULLER	NGT 00-030-089	4701
39	UNIV MARYLAND-COL PK	G ASRAR	HQ	A C SOFFER	NGT 00-030-130	4702
39	UNIV MARYLAND-COL PK	G ASRAR	HQ	S D PRINCE	NGT 00-030-168	4703
39	UNIV MARYLAND-COL PK	G ASRAR	HQ	J R TOWNSHEND	NGT 00-030-201	4704
39	UNIV MARYLAND-COL PK	J S THEON	HQ	S NIGAM	NGT 00-030-276	4706
39	U OF MD BALTIMOR CTY	F G HALL	GSFC	T W FORESMAN	NAG 5-2379	4729
39	U OF MD BALTIMOR CTY	L M STUART	GSFC	T W FORESMAN	NAG 5-2407	4730
39	CLARK UNIVERSITY	M R HELFERT	HQ	R KASPERSON	NAGW 3187	4775
39	CLARK UNIVERSITY	G ASRAR	HQ	J R EASTMAN	NGT 00-030-179	4776
39	HARVARD UNIVERSITY	F G HALL	GSFC	S C WOFSY	NAG 5-2253	4796
39	HARVARD UNIVERSITY	A C JANETOS	HQ	S C WOFSY	NAGW 3082	4816
39	HARVARD UNIVERSITY	D M BUTLER	HQ	S L BASSOW	NGT 00-030-044	4832
39	HARVARD UNIVERSITY	G ASRAR	HQ	M S MCELROY	NGT 00-030-182	4837
39	HARVARD UNIVERSITY	G ASRAR	HQ	F A BAZZAZ	NGT 00-030-195	4839
39	MASS INST OF TECH	L A LUTZ	JSC	H C ALEXANDER	NAG 9-125	4967
39	MASS INST OF TECH	R E MURPHY	HQ	D ENTEKHABI	NAGW 2942	5014
39	MASS INST OF TECH	R E MURPHY	HQ	D ENTEKHABI	NAGW 3808	5029
39	MASS INST OF TECH	W LAU	GSFC	P EAGLESON	NAS 5-31721	5042
39	MASS INST OF TECH	G SOFFEN	GSFC	T HERRING	NAS 5-33017	5045
39	MASS INST OF TECH	G SOFFEN	GSFC	R REILINGER	NAS 5-33020	5046
39	MASS INST OF TECH	D M BUTLER	HQ	E A ELTAHIR	NGT 00-030-086	5068
39	MASS INST OF TECH	G ASRAR	HQ	A M MACDONALD	NGT 00-030-151	5070
39	UNIV OF MASS-AMHERST	G ASRAR	HQ	J D ISHAM	NGT 00-030-149	5127
39	WOODSHOLE OCEAN INST	M M AVERNER	HQ	J W DACEY	NAGW 2783	5143
39	MICHIGAN TECH UNIV	D M BUTLER	HQ	J M KWIATKOWSKI	NGT 00-030-061	5188
39	MICHIGAN TECH UNIV	G ASRAR	HQ	A N PILANT	NGT 00-030-128	5189
39	SAGINAW VALLEY ST U	D M BUTLER	HQ	R S YIEN	NAGW 2010	5193
39	UNIV MICH-ANN ARBOR	H K RAMAPRIYAN	GSFC	A W ENGLAND	NAG 5-1781	5234
39	UNIV MICH-ANN ARBOR	J C DODGE	HQ	F T ULABY	NAGW 1101	5259
39	UNIV MICH-ANN ARBOR	D E WICKLAND	HQ	M C DOBSON	NAGW 1362	5261
39	UNIV MICH-ANN ARBOR	G ASRAR	HQ	A W ENGLAND	NAGW 1983	5272
39	UNIV MICH-ANN ARBOR	G ASRAR	HQ	F ULABY	NAGW 2151	5277

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
39	UNIV MICH-ANN ARBOR	R E MURPHY	HQ	A W ENGLAND	NAGW 3430	5289
39	UNIV MICH-ANN ARBOR	J RICHARDS	GSFC	S ATREYA	NAS 5-32361	5307
39	UNIV MICH-ANN ARBOR	D M BUTLER	HQ	W KUHN	NGT 00-030-208	5326
39	UNIV MICH-ANN ARBOR	G ASRAR	HQ	P J SAMSON	NGT 00-030-219	5327
39	UNIV MICH-ANN ARBOR	A C JANETOS	HQ	J A TEERI	NGT 00-030-258	5328
39	WAYNE STATE UNIV	F G HALL	GSFC	N S GOEL	NAG 5-2237	5356
39	WAYNE STATE UNIV	D E WICKLAND	HQ	N S GOEL	NAGW 3260	5357
39	U MINN-MNPLS-ST PAUL	F HASLER	GSFC	T E BURK	NAG 5-2698	5385
39	U MINN-MNPLS-ST PAUL	W HUNTRESS	HQ	M E BAUER	NAGW 1431	5392
39	U MINN-MNPLS-ST PAUL	G ASRAR	HQ	A M BRAUNSCHEWIG	NGT 00-030-017	5416
39	U MINN-MNPLS-ST PAUL	D M BUTLER	HQ	P KUMAR	NGT 00-030-055	5418
39	U MINN-MNPLS-ST PAUL	G ASRAR	HQ	E F GEORGIOU	NGT 00-030-213	5420
39	UNIV MO-COLUMBIA	R H THOMAS	HQ	C DAVIS	NAGW 3864	5495
39	WASHINGTON UNIVERSTY	D E SMITH	GSFC	R J PHILLIPS	NAG 5-2246	5511
39	UNIV OF MONTANA	P J SELLERS	GSFC	R E HUNT	NAG 5-2065	5569
39	UNIV OF MONTANA	F G HALL	GSFC	S W RUNNING	NAG 5-2297	5570
39	UNIV OF MONTANA	D E WICKLAND	HQ	S W RUNNING	NAGW 952	5572
39	UNIV OF MONTANA	R E MURPHY	HQ	R NEMANI	NAGW 3151	5573
39	UNIV OF MONTANA	H OSEROFF	GSFC	S W RUNNING	NAS 5-31368	5574
39	UNIV OF MONTANA	G ASRAR	HQ	L L PIERCE	NGT 00-030-007	5575
39	UNIV OF MONTANA	G ASRAR	HQ	S W RUNNING	NGT 00-030-216	5577
39	UNIV NEBRASKA-LINCLN	D L TOLL	GSFC	B L BLAD	NAG 5-894	5584
39	UNIV NEBRASKA-LINCLN	D W DEERING	GSFC	B L BLAD	NAG 5-1762	5586
39	UNIV NEBRASKA-LINCLN	F G HALL	GSFC	D E JELINSKI	NAG 5-2331	5587
39	UNIV NEBRASKA-LINCLN	F G HALL	GSFC	S B VERMA	NAG 5-2585	5588
39	UNIV NEBRASKA-LINCLN	W B KRABILL	GSFC	K C KUIVINAN	NAG 5-5024	5590
39	UNIV NEBRASKA-LINCLN	R H THOMAS	HQ	B L HANSEN	NAGW 3106	5596
39	UNIV NEBRASKA-LINCLN	M R HELFERT	HQ	D RUNDQUIST	NAGW 3262	5597
39	UNIV NEBRASKA-LINCLN	A J TUYAHOV	HQ	J W MERCHANT	NAGW 3940	5598
39	UNIV NEBRASKA-LINCLN	E LUCIER	HQ	D GALE	NAGW 3984	5599
39	UNIV NEBRASKA-LINCLN	G ASRAR	HQ	T L MOTE	NGT 00-030-127	5601
39	DARTMOUTH COLLEGE	R H THOMAS	HQ	K C JEZEK	NAGW 1838	5632
39	UNIV NEW HAMP-DURHAM	F G HALL	GSFC	P M CRILL	NAG 5-2289	5659
39	UNIV NEW HAMP-DURHAM	F G HALL	GSFC	R C HARRISS	NAG 5-2290	5660
39	UNIV NEW HAMP-DURHAM	D E WICKLAND	HQ	B N ROCK	NAGW 1245	5670
39	UNIV NEW HAMP-DURHAM	D E WICKLAND	HQ	J D ABER	NAGW 1825	5673
39	UNIV NEW HAMP-DURHAM	D E WICKLAND	HQ	B MOORE	NAGW 1888	5675
39	UNIV NEW HAMP-DURHAM	S TILLFORD	HQ	B MOORE	NAGW 2294	5677
39	UNIV NEW HAMP-DURHAM	R E MURPHY	HQ	B MOORE	NAGW 2669	5680
39	UNIV NEW HAMP-DURHAM	A C JANETOS	HQ	R C HARRISS	NAGW 2726	5682
39	UNIV NEW HAMP-DURHAM	A C JANETOS	HQ	B N ROCK	NAGW 2741	5683
39	UNIV NEW HAMP-DURHAM	A C JANETOS	HQ	D L SKOLE	NAGW 2749	5684
39	UNIV NEW HAMP-DURHAM	M M AVERNER	HQ	M E HINES	NAGW 2771	5687
39	UNIV NEW HAMP-DURHAM	A C JANETOS	HQ	J ABER	NAGW 3194	5690
39	UNIV NEW HAMP-DURHAM	D E WICKLAND	HQ	P M CRILL	NAGW 3774	5699
39	UNIV NEW HAMP-DURHAM	T BRAKE	GSFC	J ABER	NAS 5-31379	5703
39	UNIV NEW HAMP-DURHAM	D M BUTLER	HQ	A D NOBRE	NGT 00-030-059	5708
39	UNIV NEW HAMP-DURHAM	G ASRAR	HQ	W MCDOWELL	NGT 00-030-196	5709
39	UNIV NEW HAMP-DURHAM	F C OWENS	HQ	R C HARRIS	NGT 00-050-670	5713
39	PRINCETON UNIVERSITY	S HAKKINEN	GSFC	G L MELLOR	NAG 5-1556	5732
39	PRINCETON UNIVERSITY	E T ENGMAN	GSFC	E WOOD	NAG 5-1628	5733
39	PRINCETON UNIVERSITY	F G HALL	GSFC	E WOOD	NAG 5-2326	5743
39	PRINCETON UNIVERSITY	D E WICKLAND	HQ	S W PACALA	NAGW 3741	5768
39	PRINCETON UNIVERSITY	W LAU	GSFC	E WOOD	NAS 5-31719	5771
39	PRINCETON UNIVERSITY	D M BUTLER	HQ	D S LIN	NGT 00-030-049	5773
39	PRINCETON UNIVERSITY	D M BUTLER	HQ	B M LOFGREN	NGT 00-030-090	5774
39	PRINCETON UNIVERSITY	G ASRAR	HQ	S G PHILANDER	NGT 00-030-197	5775
39	RUTGERS ST U-N BRNSK	D M BUTLER	HQ	M G HUGHES	NGT 00-030-063	5798
39	RUTGERS ST U-N BRNSK	G ASRAR	HQ	D A ROBINSON	NGT 00-030-164	5799
39	RUTGERS ST U-PISCTWY	R H THOMAS	HQ	D A ROBINSON	NAGW 3568	5808

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
39	RUTGERS ST U-PISCTWY	D M BUTLER	HQ	S S LUQUE	NGT 00-030-070	5810
39	NEW MEX ST U-LAS CR	R S NOCK	GSFC	J E HALLIGAN	NAS 5-29800	5852
39	NEW MEX ST U-LAS CR	R S NOCK	GSFC	J E HALLIGAN	NAS 5-31125	5855
39	UNIV OF NEW MEXICO	A KAHN	HQ	T M BUDGE	NASW 4683	5889
39	CITY U OF NY CTY COL	D TRAVIS	GSFC	L P JONES	NCC 5-74	5908
39	COLUMBIA UNIVERSITY	L D TRAVIS	GSFC	C E ROSENWEIG	NCC 5-61	5992
39	COLUMBIA UNIVERSITY	D M BUTLER	HQ	K G HARRISON	NGT 00-030-081	5994
39	COLUMBIA UNIVERSITY	G ASRAR	HQ	R BELL	NGT 00-030-166	5996
39	COLUMBIA UNIVERSITY	G ASRAR	HQ	D M PETEET	NGT 00-030-177	5998
39	COLUMBIA UNIVERSITY	G ASRAR	HQ	R G FAIRBANKS	NGT 00-030-185	5999
39	COOPER UNION	V C VANDERBILT	ARC	F L FONTAINE	NCC 2-5101	6007
39	CORNELL UNIVERSITY	M BALTUCK	HQ	B ISACKS	NAGW 2638	6071
39	CORNELL UNIVERSITY	C B PILCHER	HQ	J VEVERKA	NAGW 3320	6081
39	CORNELL UNIVERSITY	W LAU	GSFC	W BRUTSAET	NAS 5-31723	6091
39	CORNELL UNIVERSITY	D M BUTLER	HQ	R J QUALLS	NGT 00-030-065	6097
39	STATE UNIV NY-ALBANY	F G HALL	GSFC	D B FITZIARRALD	NAG 5-2242	6204
39	STATE U NY-BINGHAMTN	G ASRAR	HQ	N S GOEL	NAGW 2699	6224
39	STATE UNIV NY-BUFFAL	F G HALL	GSFC	N GOEL	NAG 5-1627	6235
39	STATE U NY-STONY BRK	M J KURYLO	HQ	P VARANASI	NAGW 1238	6264
39	STATE U NY-STONY BRK	W LAU	GSFC	M GELLER	NAS 5-31720	6283
39	STATE U NY-STONY BRK	G ASRAR	HQ	A M WALLACE	NGT 00-030-146	6288
39	SYRACUSE UNIVERSITY	G ASRAR	HQ	B J WILSEY	NGT 00-030-124	6307
39	DUKE UNIVERSITY	D R CAHOON	LARC	E S KASISCHKE	NAG 1-1592	6327
39	DUKE UNIVERSITY	R H THOMAS	HQ	N L CHRISTENSEN	NAGW 2692	6333
39	DUKE UNIVERSITY	D M BUTLER	HQ	A E HARTLEY	NGT 00-030-069	6338
39	DUKE UNIVERSITY	D M BUTLER	HQ	A F CROSS	NGT 00-030-077	6339
39	DUKE UNIVERSITY	G ASRAR	HQ	W H SCHLESINGER	NGT 00-030-199	6340
39	NO CAR A&T STATE U	R L YANG	LARC	G A UZOCHUKWU	NAG 1-1454	6362
39	NO CAROLINA STATE U	M J KURYLO	HQ	N E BLAIR	NAGW 838	6393
39	NO CAROLINA STATE U	G ASRAR	HQ	C C SPAUR	NGT 00-030-117	6419
39	UNIV N CAR-CHPL HILL	M J KURYLO	HQ	C S MARTENS	NAGW 834	6438
39	UNIV N CAR-CHPL HILL	D E WICKLAND	HQ	C S MARTENS	NAGW 1455	6439
39	UNIV N CAR-CHPL HILL	D E WICKLAND	HQ	C S MARTENS	NAGW 3681	6442
39	UNIV N CAR-CHPL HILL	F C OWENS	HQ	C S MARTENS	NGT 00-050-656	6446
39	UNIV OF NORTH DAKOTA	F HASLER	GSFC	C A WOOD	NAG 5-2696	6460
39	CENTRAL ST UNIV-OHIO	B L WHITE	HQ	D J LOVE	NAGW 4077	6577
39	OHIO STATE UNIV	W B KRABILL	GSFC	K C JEZEK	NAG 5-684	6686
39	OHIO STATE UNIV	R H THOMAS	HQ	K JEZEK	NAGW 2644	6702
39	OHIO STATE UNIV	R H THOMAS	HQ	D H BROMWICH	NAGW 2718	6703
39	OHIO STATE UNIV	R H THOMAS	HQ	D H BROMWICH	NAGW 3677	6708
39	OHIO STATE UNIV	R H THOMAS	HQ	L THOMPSON	NAGW 3933	6710
39	OHIO STATE UNIV	D M BUTLER	HQ	G CASASSA	NGT 00-030-053	6723
39	OHIO UNIVERSITY	B MARTIN	KSC	F C HAGERMAN	NGT 00-050-863	6740
39	OREGON STATE UNIV	E T ENGMAN	GSFC	R CUENCA	NAG 5-2013	6920
39	OREGON STATE UNIV	F G HALL	GSFC	L MAHRT	NAG 5-2300	6921
39	OREGON STATE UNIV	F G HALL	GSFC	D MARKS	NAG 5-2301	6922
39	OREGON STATE UNIV	F G HALL	GSFC	R H CUENCA	NAG 5-2377	6923
39	OREGON STATE UNIV	D ADAMEC	HQ	P T STRUB	NAGW 2475	6928
39	OREGON STATE UNIV	M Y WEI	HQ	E C WEYINIRE	NAGW 2707	6929
39	OREGON STATE UNIV	D E WICKLAND	HQ	R H WARING	NAGW 3642	6938
39	OREGON STATE UNIV	D E WICKLAND	HQ	D O WALLIN	NAGW 3745	6942
39	OREGON STATE UNIV	D E WICKLAND	HQ	B J YODER	NAGW 3870	6943
39	OREGON STATE UNIV	G ASRAR	HQ	P SOLLINS	NGT 00-030-203	6953
39	PENN STATE U-UNIV PK	G ASRAR	HQ	T N CARLSON	NAGW 2647	7139
39	PENN STATE U-UNIV PK	R A SCHIFFER	HQ	R G NAJJAR	NAGW 3929	7154
39	PENN STATE U-UNIV PK	G ASRAR	HQ	K L O'BRIEN	NGT 00-030-152	7178
39	UNIV SO CAROLINA-COL	M R HELFERT	HQ	J JENSEN	NAGW 3169	7370
39	UNIV SO CAROLINA-COL	C	SSC	J R JENSEN	NAG13-27	7372
39	SO DAKOTA SCHL MINES	T BRAKE	GSFC	R WELCH	NAS 5-31718	7385
39	MIDDLE TENN ST UNIV	M R HELFERT	HQ	O'FARRELL	NAGW 3170	7407

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
39	TEXAS A&M UNIVERSITY	G ASRAR	HQ	J B VALDES	NAGW 2427	7647
39	TEXAS A&M UNIVERSITY	M R HALFERT	HQ	J GIARDINO	NAGW 3186	7650
39	TEXAS A&M UNIVERSITY	G ASRAR	HQ	W M CHILDRESS	NGT 00-030-032	7664
39	TEXAS A&M UNIVERSITY	D RUSSELL	HQ	M DREW	NGT 00-070-387	7681
39	UNIV TEXAS-ARLINGTON	D E WICKLAND	HQ	A K FUNG	NAGW 3091	7808
39	UNIV TEXAS-ARLINGTON	K J RANSON	HQ	D P GIBBS	NAGW 3421	7809
39	UNIV TEXAS-AUSTIN	A J ANDERSON	HQ	B TAPLEY	NAGW 2615	7877
39	UNIV TEXAS-AUSTIN	R E MURPHY	HQ	C R WILSON	NAGW 3131	7885
39	UNIV TEXAS-AUSTIN	D E WICKLAND	HQ	M M CRAWFORD	NAGW 3743	7889
39	UNIV TEXAS-AUSTIN	M Y WEI	HQ	J S FAMIGLIETTI	NAGW 4087	7896
39	UNIV TEXAS-AUSTIN	G SOFFE	GSFC	B SCHUTZ	NAS 5-33021	7900
39	UNIV TEXAS-AUSTIN	G ASRAR	HQ	V NUTH	NGT 00-030-001	7907
39	UNIV TEXAS-AUSTIN	G ASRAR	HQ	A SLUYTER	NGT 00-030-129	7908
39	UNIV TEXAS-AUSTIN	G ASRAR	HQ	C PARMESEAN	NGT 00-030-158	7909
39	UNIV TEXAS-DALLAS	C J POLLOCK	MSFC	J H HOFFMAN	NAS 8-39692	7951
39	UNIV OF UTAH	F G HALL	GSFC	J EHLERINGER	NAG 5-2241	8001
39	UTAH STATE UNIV	E T ENGMAN	GSFC	C BINGHAM	NAG 5-2043	8019
39	UTAH STATE UNIV	M E MAIDEN	HQ	C M NEALE	NAGW 3221	8026
39	WEBER STATE COL	F SIX	MSFC	D M VAUGHN	NAG 8-214	8043
39	CHRISTPHR NEWPORT U	D E WICKLAND	HQ	G J WHITING	NAGW 3736	8056
39	NORFOLK STATE UNIV	R HATHAWAY	LARC	F MILLER	NCC 1-200	8129
39	UNIV OF VIRGINIA	D L WILLIAMS	GSFC	H H SHUGART	NAG 5-1018	8231
39	UNIV OF VIRGINIA	STOCKEY	GSFC	M GARSTANG	NAG 5-1961	8234
39	UNIV OF VIRGINIA	F G HALL	GSFC	H H SHUGART	NAG 5-2295	8238
39	UNIV OF VIRGINIA	G ASRAR	HQ	J F WEISHAMPEL	NGT 00-030-028	8269
39	UNIV OF VIRGINIA	G ASRAR	HQ	M A LEFSKY	NGT 00-030-157	8270
39	UNIV OF VIRGINIA	F C OWENS	HQ	M GARSTANG	NGT 00-050-722	8275
39	UNIV OF VIRGINIA	F C OWENS	HQ	A L MILLS	NGT 00-050-750	8277
39	NORTHWEST INDIAN COL	A HATCH	ARC	R LORENCE	NAGW 3622	8421
39	UNIV OF WASHINGTON	F G HALL	GSFC	D P LETTENMAIER	NAG 5-2294	8449
39	UNIV OF WASHINGTON	M J KURYLO	HQ	P D QUAY	NAGW 844	8464
39	UNIV OF WASHINGTON	G ASRAR	HQ	D P LETTERMAIER	NAGW 2556	8480
39	UNIV OF WASHINGTON	R E MURPHY	HQ	J E RICHEY	NAGW 2652	8484
39	UNIV OF WASHINGTON	D F WICKLAND	HQ	J B ADAMS	NAGW 3195	8491
39	UNIV OF WASHINGTON	J A KAYE	HQ	J HOLLEN	NAGW 3794	8506
39	UNIV OF WASHINGTON	G ASRAR	HQ	A P BARROS	NGT 00-030-019	8527
39	UNIV OF WASHINGTON	G ASRAR	HQ	L J CARLSON	NGT 00-030-116	8540
39	UNIV OF WASHINGTON	G ASRAR	HQ	E RISKIN	NGT 00-030-178	8543
39	UNIV WISC-MADISON	A ARKING	GSFC	D R JOHNSON	NAG 5-1330	8639
39	UNIV WISC-MADISON	F G HALL	GSFC	S T GOWER	NAG 5-2601	8663
39	UNIV WISC-MADISON	N LAL	GSFC	J W PERCIVAL	NAG 5-2694	8667
39	UNIV WISC-MADISON	G ASRAR	HQ	J M NORMAN	NAGW 2536	8692
39	UNIV WISC-MADISON	A C JANETOS	HQ	W P MENZEL	NAGW 2751	8694
39	UNIV WISC-MADISON	J C DODGE	HQ	W P MENZEL	NAGW 2973	8701
39	UNIV WISC-MADISON	D E WICKLAND	HQ	E W ELORANTA	NAGW 3708	8708
39	UNIV WISC-MADISON	D M BUTLER	HQ	W L SMITH	NAGW 3732	8709
39	UNIV WISC-MADISON	J C DODGE	HQ	P MENZEL	NAGW 3804	8710
39	UNIV WISC-MADISON	E KREINS	GSFC	W L SMITH	NAS 5-31377	8732
39	UNIV WISC-MADISON	G SOFFEN	GSFC	C BENTLEY	NAS 5-33015	8734
39	UNIV WISC-MADISON	G ASRAR	HQ	T M LILLESAND	NGT 00-030-034	8744
39	UNIV WISC-MADISON	G ASRAR	HQ	R G WAGNER	NGT 00-030-113	8745
39	UNIV WISC-MADISON	F G HALL	GSFC	R D KELLY	NAG 5-2240	8771
39	UNIV OF WYOMING	R H THOMAS	HQ	T R PARISH	NAGW 2666	8778
39	U PUERTO RICO MED SC	JOYCE	SSC	NORAT	NAG13-29	8784
39	U PUERTO RICO MED SC	D RUSSELL	HQ	J NORAT	NGT 00-070-391	8785
39	U PUERTO RICO-MAYAGZ	A T JOYCE	SSC	L L RODRIGUEZ	NAG13-17	8792
39	U PUERTO RICO-MAYAGZ	A C JANETOS	HQ	J CORREDOR	NGT 00-030-272	8795
39	U PUERTO RICO-RIO PI	B L WHITE	HQ	B R WEINER	NAGW 4059	8811
39	U PUERTO RICO-RIO PI	A T JOYCE	SSC	N FLETCHER	NAG13-18	8812
39	U PUERTO RICO-RIO PI	A JOYCE	SSC	A D CRUZ	NGT 00-070-239	8813

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	AUBURN UNIV-AUBURN	W R WATSON	LARC	M J CROCKER	NAG 1-1467	1019
41	AUBURN UNIV-AUBURN	C LAWRENCE	LERC	G T FLOWERS	NAG 3-1507	1021
41	AUBURN UNIV-AUBURN	C C RUPP	MSFC	M E GREENE	NAG 8-808	1023
41	AUBURN UNIV-AUBURN	R H ESKRIDGE	MSFC	R J HARTFIELD	NAG 8-1017	1026
41	TUSKEGEE UNIVERSITY	S O KIELGARD	LARC	D SREE	NAG 1-1549	1053
41	TUSKEGEE UNIVERSITY	L SCHILLING	ARC	S F ALI	NAG 2-4006	1054
41	UNIV ALA-HUNTSVILLE	F SIX	MSFC	G R KARR	NAG 8-212	1099
41	UNIV ALA-HUNTSVILLE	B H NERREN	MSFC	G L WORKMAN	NAG 8-1071	1123
41	UNIV ALA-HUNTSVILLE	R L WRIGHT	LARC	J A BIJVOET	NAS 1-19417	1147
41	UNIV ALA-TUSCALOOSA	S GARG	LERC	K S KRISHNAKUMAR	NAG 3-1564	1188
41	UNIV ALA-TUSCALOOSA	R F NIXON	MSFC	J A MARTIN	NAG 8-1026	1205
41	UNIV ALA-TUSCALOOSA	N S BROWN	MSFC	J A MARTIN	NAG 8-1045	1206
41	UNIV ALA-TUSCALOOSA	L EVANS	LARC	A KATZ	NGT 00-051-245	1215
41	ARIZONA STATE UNIV	J R DAGENHART	LARC	W S SARIC	NAG 1-937	1267
41	ARIZONA STATE UNIV	T B GATSKI	LARC	R SO	NAG 1-1080	1268
41	ARIZONA STATE UNIV	D M BUSHNELL	LARC	W S SARIC	NAG 1-1111	1270
41	ARIZONA STATE UNIV	C L STREETT	LARC	H L REED	NAG 1-1158	1271
41	ARIZONA STATE UNIV	I M GREGORY	LARC	D K SCHMIDT	NAG 1-1341	1273
41	ARIZONA STATE UNIV	T B GATSKI	LARC	R M SO	NAG 1-1399	1274
41	ARIZONA STATE UNIV	S KOTTAPALLI	ARC	A CHATTOPADHYAY	NAG 2-771	1276
41	ARIZONA STATE UNIV	Y H YU	ARC	V WELLS	NAG 2-844	1277
41	ARIZONA STATE UNIV	T L GALLOWAY	ARC	V WELLS	NAG 2-882	1278
41	ARIZONA STATE UNIV	H MIURA	ARC	A CHATTOPADHYAY	NAG 2-908	1279
41	ARIZONA STATE UNIV	P D TALBOT	ARC	V L WELLS	NAG 2-918	1280
41	ARIZONA STATE UNIV	R E BULLARD	LERC	D K SCHMIDT	NAG 3-998	1281
41	ARIZONA STATE UNIV	T A EDWARDS	ARC	A CHATTOPADHYAY	NCA 2-778	1327
41	ARIZONA STATE UNIV	J R DAGENHART	LARC	W S SARIC	NCC 1-194	1329
41	ARIZONA STATE UNIV	J F MADDEN	ARC	A CHATTOPADHYAY	NCC 2-795	1331
41	ARIZONA STATE UNIV	E TU	ARC	A CHATTOPADHYAY	NCC 2-5064	1332
41	UNIV OF ARIZONA	T B GATSKI	LARC	E J KERSCHEN	NAG 1-1135	1349
41	UNIV OF ARIZONA	C L STREETT	LARC	H F FASEL	NAG 1-1422	1350
41	UNIV OF ARIZONA	K B PASCHAL	LARC	I J WYGNANSKI	NAG 1-1611	1351
41	UNIV OF ARIZONA	C M DARDEN	LARC	S C CROW	NAG 1-1629	1353
41	UNIV OF ARIZONA	S DAVIS	ARC	K Y FUNG	NAG 2-847	1360
41	UNIV OF ARIZONA	J F GROENEWEG	LERC	E J KERSCHEN	NAG 3-357	1363
41	UNIV OF ARIZONA	J H MILES	LERC	T BALSA	NAG 3-781	1364
41	UNIV OF ARIZONA	M E GOLDSTEIN	LERC	K FUNG	NAG 3-1436	1367
41	UNIV OF ARIZONA	L J HEIDELBERG	LERC	E KERSCHEN	NAG 3-1442	1368
41	UNIV OF ARIZONA	L S HULTGREEN	LERC	E J KERSCHEN	NAG 3-1524	1371
41	UNIV OF ARIZONA	T D SWANSON	GSFC	K R SRIDHAR	NAG 5-1572	1376
41	UNIV OF ARIZONA	M M JUROTICH	GSFC	R L THOMPSON	NAS 5-31289	1516
41	UNIV OF ARIZONA	R E BACH	ARC	E K PARKS	NCC 2-329	1524
41	UNIV OF ARIZONA	G S SEIDEL	HQ	K RAMOHALLI	NGT 00-010-020	1529
41	UNIV ARKANSAS-LTL RK	ST.CYR	SSC	K HUDSON	NAG13-31	1580
41	CALIF INST OF TECH	T S GATES	LARC	W G KNAUSS	NAG 1-1203	1586
41	CALIF INST OF TECH	R C ROGERS	LARC	H G HORNUNG	NAG 1-1209	1587
41	CALIF INST OF TECH	R M HICKS	ARC	F E CULICK	NAG 2-732	1588
41	CALIF INST OF TECH	M J BRENNER	ARC	J C DOYLE	NAG 2-792	1590
41	CALIF INST OF TECH	J H STARNES	LARC	W G KNAUSS	NSG-1483	1719
41	CAL POLY ST U-S LUIS	J J SAMUELS	ARC	D SANDLIN	NAG 2-743	1720
41	CAL POLY ST U-S LUIS	R J RAY	ARC	T W CARPENTER	NAG 2-778	1721
41	CAL POLY ST U-S LUIS	M MADISON	ARC	J G LOCASCIO	NAG 2-932	1723
41	CAL POLY ST U-S LUIS	L B SCHIFF	ARC	R M CUMNINGS	NCA 2-626	1724
41	CAL POLY ST U-S LUIS	C TUNG	ARC	J TSO	NCA 2-722	1725
41	CAL POLY ST U-S LUIS	M W KEHOE	ARC	F A KOLKAILAH	NCA 2-779	1726
41	CAL POLY ST U-S LUIS	K MCALISTER	ARC	J TSO	NCA 2-811	1727
41	CAL POLY ST U-S LUIS	P T SODERMAN	ARC	J TSO	NCA 2-816	1728
41	CAL POLY ST U-S LUIS	C TUNG	ARC	J TSO	NCA 2-836	1729
41	CAL POLY ST U-S LUIS	A H BOWERS	ARC	T W CARPENTER	NCC 2-748	1730
41	CAL POLY ST U-S LUIS	J C ROSS	ARC	R M CUMMINGS	NCC 2-761	1731

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	CAL POLY ST U-S LUIS	H N SWENSON	ARC	D J BIEZAD	NCC 2-775	1732
41	CAL POLY ST U-S LUIS	G C HILL	ARC	D J BEIZAD	NCC 2-800	1733
41	CAL POLY ST U-S LUIS	J R ROSS	ARC	R M CUMMINGS	NCC 2-813	1734
41	CAL POLY ST U-S LUIS	M B TISCHLER	ARC	D BIEZAD	NCC 2-833	1735
41	CAL POLY ST U-S LUIS	P A GELHAUSEN	ARC	D BIEZAD	NCC 2-834	1736
41	CAL POLY ST U-S LUIS	P A GELHAUSEN	ARC	D J BIEZAD	NCC 2-855	1737
41	CAL POLY ST U-S LUIS	J C ROSS	ARC	R M CUMMINGS	NCC 2-857	1738
41	CAL POLY ST U-S LUIS	A H BOWERS	ARC	T W CARPENTER	NCC 2-4003	1739
41	CAL POLY ST U-S LUIS	D VORACEK	ARC	F KOLKAILAH	NCC 2-5031	1740
41	CAL POLY ST U-S LUIS	G S SEIDEL	HQ	R M CUMMINGS	NGT 00-010-012	1741
41	CAL POLY ST U-S LUIS	F C OWENS	HQ	R M COMMINGS	NGT 00-070-228	1742
41	CAL STATE U-LG BEACH	C S BIDWELL	LERC	T CEBECI	NAG 3-1050	1751
41	CAL STATE U-L ANGLES	R A WAHLS	LARC	C C WU	NCC 1-174	1755
41	CAL STATE U-NRTHRDGE	K GUPTA	ARC	P K RUSSELL	NCA 2-790	1760
41	CAL STATE U-NRTHRDGE	A H BOWERS	ARC	S D SCHWARTZ	NCC 2-821	1762
41	LOYOLA MARYMOUNT U	K GUPTA	ARC	B OPPENHEIM	NAG 2-4007	1777
41	SAN DIEGO STATE UNIV	J ROSS	ARC	J KATZ	NCA 2-786	1787
41	SAN JOSE STATE UNIV	T J DAVIS	ARC	W F NEDELL	NAG 2-537	1804
41	SAN JOSE STATE UNIV	R A KENNELLY	ARC	R V WESTPHAL	NCA 2-677	1816
41	SAN JOSE STATE UNIV	D RIDDLE	ARC	N MOURTOS	NCA 2-683	1817
41	SAN JOSE STATE UNIV	R A KENNELLY JR.	ARC	R V WESTPHAL	NCA 2-809	1827
41	SAN JOSE STATE UNIV	G S DEIWERT	ARC	R DESAUTEL	NCC 2-858	1850
41	SAN JOSE STATE UNIV	W C HORNE	ARC	N J MOURTOS	NCC 2-5063	1853
41	SANTA CLARA UNIV	B SRIDHAR	ARC	P K MENON	NCC 2-793	1866
41	SANTA CLARA UNIV	B SRIDHAR	ARC	P K MENON	NCC 2-841	1867
41	SANTA CLARA UNIV	V H CHENG	ARC	P K MENON	NCC 2-5019	1868
41	SANTA CLARA UNIV	H MIURA	ARC	M D ARDEMA	NCC 2-5068	1869
41	SANTA CLARA UNIV	J V BOWLES	ARC	M D ARDEMA	NCC 2-5069	1870
41	STANFORD UNIVERSITY	J L ROGERS	LARC	I KROO	NAG 1-1052	1877
41	STANFORD UNIVERSITY	J SOBIESKI	LARC	I M KROO	NAG 1-1494	1878
41	STANFORD UNIVERSITY	J F BARTHELEMY	LARC	I M KROO	NAG 1-1558	1879
41	STANFORD UNIVERSITY	S K ROBINSON	LARC	S J KLINE	NAG 1-1610	1880
41	STANFORD UNIVERSITY	S K ROBINSON	LARC	P BRADSHAW	NAG 1-1614	1881
41	STANFORD UNIVERSITY	H MIURA	ARC	I KROO	NAG 2-640	1884
41	STANFORD UNIVERSITY	T A LASINSKI	ARC	L HESSELINK	NAG 2-701	1887
41	STANFORD UNIVERSITY	T J GREGORY	ARC	I KROO	NAG 2-759	1889
41	STANFORD UNIVERSITY	P J OUZTS	LERC	S M ROCK	NAG 3-1177	1898
41	STANFORD UNIVERSITY	D VITAGLIANO	GSFC	J G TIMOTHY	NAS 5-29389	1942
41	STANFORD UNIVERSITY	L B SCHIFF	ARC	L HESSELINK	NCA 2-578	1947
41	STANFORD UNIVERSITY	J A SCHROEDER	ARC	S M ROCK	NCA 2-594	1948
41	STANFORD UNIVERSITY	G S DEIWERT	ARC	R W MACCORMACK	NCA 2-595	1949
41	STANFORD UNIVERSITY	J A CAVOLOWSKY	ARC	R K HANSON	NCA 2-607	1950
41	STANFORD UNIVERSITY	L SCHIFF	ARC	L HESSELINK	NCA 2-632	1951
41	STANFORD UNIVERSITY	S P SHARMA	ARC	D BERSHADER	NCA 2-638	1952
41	STANFORD UNIVERSITY	W J FEIEREISEN	ARC	D BAGANOFF	NCA 2-693	1954
41	STANFORD UNIVERSITY	W J FEIEREISEN	ARC	D BAGANOFF	NCA 2-700	1955
41	STANFORD UNIVERSITY	S P SHARMA	ARC	D BERSHADER	NCA 2-723	1958
41	STANFORD UNIVERSITY	T H PULLIAM	ARC	R W MACCORMACK	NCA 2-752	1960
41	STANFORD UNIVERSITY	L SCHIFF	ARC	L HESSELINK	NCA 2-765	1962
41	STANFORD UNIVERSITY	A VAZIRI	ARC	L HESSELINK	NCA 2-781	1965
41	STANFORD UNIVERSITY	J D PHILLIPS	ARC	I KROO	NCA 2-805	1967
41	STANFORD UNIVERSITY	D C REDA	ARC	R J MOFFAT	NCA 2-807	1968
41	STANFORD UNIVERSITY	S P SHARMA	ARC	D BERSHADER	NCA 2-812	1970
41	STANFORD UNIVERSITY	J A CAVOLOWSKY	ARC	R K HANSON	NCA 2-828	1971
41	STANFORD UNIVERSITY	J A CAVOLOWSKY	ARC	R K HANSON	NCA 2-829	1972
41	STANFORD UNIVERSITY	P GOORJIAN	ARC	R W MACCORMACK	NCA 2-830	1973
41	STANFORD UNIVERSITY	C A SMITH	ARC	L ROBERTS	NCC 2-55	1974
41	STANFORD UNIVERSITY	M D MADSON	ARC	I M KROO	NCC 2-683	1980
41	STANFORD UNIVERSITY	B SRIDHAR	ARC	S M ROCK	NCC 2-844	1985
41	STANFORD UNIVERSITY	D A JOHNSON	ARC	J EATON	NCC 2-5001	1986

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	STANFORD UNIVERSITY	C TUNG	ARC	D BERSHADER	NCC 2-5002	1987
41	STANFORD UNIVERSITY	R CHEN	ARC	S ROCK	NCC 2-5020	1988
41	STANFORD UNIVERSITY	J D PHILIPS	ARC	I	NCC 2-5025	1990
41	STANFORD UNIVERSITY	K SHARIFF	ARC	B K YAKUB	NCC 2-5033	1992
41	STANFORD UNIVERSITY	G S DIEWERT	ARC	B J CANTWELL	NCC 2-5034	1993
41	STANFORD UNIVERSITY	H MIRUA	ARC	I KROO	NCC 2-5059	1995
41	STANFORD UNIVERSITY	S SHARMA	ARC	D BERSHADER	NCC 2-5065	1996
41	STANFORD UNIVERSITY	D KWAK	ARC	B J CANTWELL	NCC 2-5070	1998
41	STANFORD UNIVERSITY	G S DEIWERT	ARC	B J CANTWELL	NCC 2-5071	1999
41	STANFORD UNIVERSITY	W J FEIEREISEN	ARC	D BAGANOFF	NCC 2-5072	2000
41	STANFORD UNIVERSITY	N N MANSOUR	ARC	P BRADSHAW	NCC 2-5089	2003
41	STANFORD UNIVERSITY	W R VAN DALSEM	ARC	L HESSELINK	NCC 2-5095	2004
41	STANFORD UNIVERSITY	G S SEIDEL	HQ	I KROO	NGT 00-010-018	2006
41	STANFORD UNIVERSITY	M MOORE	ARC	G M HOMSY	NGT 00-050-747	2017
41	STANFORD UNIVERSITY	S GOLDSTEIN	JSC	R H CANNON	NGT 00-051-056	2025
41	STANFORD UNIVERSITY	M MOORE	ARC	B CANTWELL	NGT 00-051-308	2029
41	STANFORD UNIVERSITY	F C OWENS	HQ	P M BANKS	NGT 00-070-116	2031
41	STANFORD UNIVERSITY	M MOORE	ARC	B CANTWELL	NGT 00-070-277	2038
41	STANFORD UNIVERSITY	D K RUSSELL	HQ	D BERSHADER	NGT 00-070-330	2040
41	STANFORD UNIVERSITY	D K RUSSELL	HQ	O KHATIB	NGT 00-070-348	2043
41	UNIV CALIF-BERKELEY	R ALEMAN	GSFC	C W CARLSON	NAS 5-31283	2171
41	UNIV CALIF-BERKELEY	R DONNELLY	GSFC	S KAHN	NAS 5-31429	2172
41	UNIV CALIF-BERKELEY	G S DEIWERT	ARC	M HOLT	NCA 2-635	2174
41	UNIV CALIF-BERKELEY	G S DEIWERT	ARC	F C HURLBUT	NCA 2-757	2177
41	UNIV CALIF-BERKELEY	T HOLST	ARC	M HOLT	NCA 2-782	2179
41	UNIV CALIF-BERKELEY	G S DEIWERT	ARC	M HOLT	NCC 2-5032	2189
41	UNIV CALIF-BERKELEY	T L HOLST	ARC	M HOLT	NCC 2-5035	2190
41	UNIV CALIF-DAVIS	J M BRANDON	LARC	C VANDAM	NAG 1-1572	2234
41	UNIV CALIF-DAVIS	D T BERRY	ARC	R A HESS	NAG 2-654	2237
41	UNIV CALIF-DAVIS	M OMURA	ARC	M HAFEZ	NAG 2-927	2242
41	UNIV CALIF-DAVIS	K GUPTA	ARC	F O EKE	NAG 2-4003	2243
41	UNIV CALIF-DAVIS	T EDWARDS	ARC	C P VAN DAM	NCA 2-581	2260
41	UNIV CALIF-DAVIS	M L MERRIAM	ARC	J J CHATTOT	NCA 2-628	2261
41	UNIV CALIF-DAVIS	R M HICKS	ARC	M HAFEZ	NCA 2-644	2262
41	UNIV CALIF-DAVIS	R L SORENSON	ARC	M M HAFEZ	NCA 2-655	2263
41	UNIV CALIF-DAVIS	D M DRIVER	ARC	B R WHITE	NCA 2-676	2264
41	UNIV CALIF-DAVIS	B SMITH	ARC	B R WHITE	NCA 2-728	2265
41	UNIV CALIF-DAVIS	P GELHAUSEN	ARC	M HAFEZ	NCA 2-760	2267
41	UNIV CALIF-DAVIS	P GOORJIAN	ARC	J J CHATTOT	NCA 2-774	2268
41	UNIV CALIF-DAVIS	P GOORJIAN	ARC	C P VAN DAM	NCA 2-775	2269
41	UNIV CALIF-DAVIS	P GOORJIAN	ARC	M HAFEZ	NCA 2-776	2270
41	UNIV CALIF-DAVIS	E P DUQUE	ARC	M HAFEZ	NCA 2-789	2272
41	UNIV CALIF-DAVIS	F X CARADONNA	ARC	J J CHATTOT	NCA 2-837	2274
41	UNIV CALIF-DAVIS	L P YIP	LARC	C P VAN DAM	NCC 1-163	2275
41	UNIV CALIF-DAVIS	M B TISCHLER	ARC	R A HESS	NCC 2-624	2277
41	UNIV CALIF-DAVIS	D KWAK	ARC	M HAFEZ	NCC 2-873	2280
41	UNIV CALIF-DAVIS	C MAKSYMUK	ARC	J CHATTOT	NCC 2-5004	2281
41	UNIV CALIF-DAVIS	R HICKS	ARC	M HAFEZ	NCC 2-5012	2282
41	UNIV CALIF-DAVIS	P A GELHAUSEN	ARC	M HAFEZ	NCC 2-5027	2283
41	UNIV CALIF-DAVIS	P A GELHAUSEN	ARC	C P VAN DAM	NCC 2-5042	2284
41	UNIV CALIF-DAVIS	S L LAWRENCE	ARC	J J CHATTOT	NCC 2-5043	2285
41	UNIV CALIF-DAVIS	T HOLST	ARC	M M HAFEZ	NCC 2-5049	2287
41	UNIV CALIF-DAVIS	E TU	ARC	M M HAFEZ	NCC 2-5050	2288
41	UNIV CALIF-DAVIS	E P DUQUE	ARC	C VAN DAM	NCC 2-5061	2290
41	UNIV CALIF-DAVIS	P BUNING	ARC	M HAFEZ	NCC 2-5085	2292
41	UNIV CALIF-IRVINE	J D HOLDEMAN	LERC	G S SAMUELSEN	NAG 3-1110	2311
41	UNIV CALIF-IRVINE	R R TALINA	LERC	G S SAMUELSEN	NAG 3-1124	2312
41	UNIV CALIF-L ANGELES	H M ADELMAN	LARC	P P FRIEDMANN	NAG 1-833	2341
41	UNIV CALIF-L ANGELES	T B GATSKI	LARC	H O KREISS	NAG 1-1428	2346
41	UNIV CALIF-L ANGELES	S A JACKLIN	ARC	P FRIEDMANN	NAG 2-477	2348

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	UNIV CALIF-L ANGELES	M J RUTKOWSKI	ARC	P P FRIEDMAN	NAG 2-835	2355
41	UNIV CALIF-L ANGELES	F C OWENS	HQ	P P FRIEDMANN	NGT 00-050-444	2478
41	UNIV CALIF-L ANGELES	M MOORE	ARC	P P FRIEDMAN	NGT 00-051-173	2483
41	UNIV CALIF-SAN DIEGO	T B GATSKI	LARC	P A LIBBY	NAG 1-1193	2495
41	UNIV CALIF-SAN DIEGO	R C LAKE	LARC	J B KOSMATKA	NAG 1-1445	2497
41	UNIV CALIF-SAN DIEGO	J DRUMMOND	LARC	S SARKAR	NAG 1-1516	2498
41	UNIV CALIF-SAN DIEGO	W E ZORUMSKI	LARC	S SARKAR	NAG 1-1535	2499
41	UNIV CALIF-S BARBARA	J H STARNES	LARC	K T KEDWARD	NAG 1-1376	2630
41	UNIV OF SOUTHERN CAL	J M SEINER	LARC	S SHRECK	NAG 1-1096	2710
41	COLORADO STATE UNIV	R J GUNDERMAN	LERC	V N BRINGI	NAS 3-26410	2790
41	UNIV COLORADO-BOLDR	C L STREETT	LARC	S BIRINGEN	NAG 1-1161	2810
41	UNIV COLORADO-BOLDR	W E ZORUMSKI	LARC	S BIRINGEN	NAG 1-1472	2816
41	UNIV COLORADO-BOLDR	J H STARNES	LARC	M M MIKULAS	NAG 1-1642	2822
41	UNIV COLORADO-BOLDR	T A LASINSKI	ARC	C FARHAT	NAG 2-827	2827
41	UNIV COLORADO-BOLDR	C C CHAMIS	LERC	C A FELIPPA	NAG 3-934	2831
41	UNIV COLORADO-BOLDR	C C CHAMIS	LERC	C FILIPPA	NAG 3-1425	2840
41	UNIV COLORADO-BOLDR	S C CHANG	LERC	C Y CHOW	NAG 3-1566	2841
41	UNIV COLORADO-BOLDR	J W KAUFMAN	MSFC	J E HART	NAG 8-1077	2927
41	UNIV COLORADO-BOLDR	D KESSLER	JSC	R CULP	NAG 9-407	2929
41	UNIV COLORADO-BOLDR	J LANDERS	HQ	D LAWRENCE	NASW 4879	3038
41	UNIV COLORADO-BOLDR	T HOLST	ARC	S BIRINGEN	NCC 2-5014	3045
41	UNIV COLORADO-BOLDR	M S LIOU	LERC	C Y CHOW	NCC 3-168	3047
41	UNIV COLORADO-BOLDR	S KANT	GSFC	P AXELRAD	NCC 5-67	3050
41	UNIV COLORADO-BOLDR	R A GUALDONI	HQ	R R HANSEN	NCCW 37	3051
41	UNIV COLORADO-BOLDR	F C OWENS	HQ	R CHASE	NGT 00-050-678	3072
41	UNIV COLORADO-BOLDR	F C OWENS	HQ	G H BORN	NGT 00-050-692	3073
41	UNIV COLORADO-BOLDR	S GOLDSTEIN	JSC	R CULP	NGT 00-050-872	3080
41	UNIV COLORADO-BOLDR	H ASHKENAS	JPL	G H BAM	NGT 00-050-887	3081
41	UNIV COLORADO-BOLDR	F SIX	MSFC	L D PETERSON	NGT 00-050-954	3088
41	UNIV COLORADO-BOLDR	E PRIOR	LARC	S BIRINGEN	NGT 00-050-985	3091
41	UNIV COLORADO-BOLDR	G SOFFEN	GSFC	D E SMITH	NGT 00-051-034	3092
41	UNIV COLORADO-BOLDR	C HIX	JPL	R R LEBEN	NGT 00-051-040	3093
41	UNIV COLORADO-BOLDR	G LESANE	HQ	R LEBEN	NGT 00-051-128	3095
41	UNIV COLORADO-BOLDR	G LESANE	HQ	G BORN	NGT 00-051-141	3097
41	UNIV COLORADO-BOLDR	B SWINFORD	MSFC	J N KOSTER	NGT 00-051-179	3098
41	UNIV COLORADO-BOLDR	G SOFFEN	GSFC	P AXELRAD	NGT 00-051-227	3101
41	UNIV COLORADO-BOLDR	G SOFFEN	GSFC	B M ARGROW	NGT 00-051-271	3103
41	UNIV COLORADO-BOLDR	D HOLLAND	HQ	G W MORGENTHALER	NGT 00-051-297	3107
41	UNIV COLORADO-BOLDR	F C OWENS	HQ	M W LUTTGES	NGT 00-070-242	3109
41	UNIV COLORADO-BOLDR	D K RUSSELL	HQ	G W ROSBOROUGH	NGT 00-070-266	3110
41	UNIV COLORADO-DENVER	R D JOSLIN	LARC	C LIU	NAG 1-1537	3118
41	UNIV OF CONNECTICUT	L REID	LERC	P HANLEY	NAG 3-1348	3141
41	UNIV OF DELAWARE	J P GYEKENYESI	LERC	T W CHOU	NAS 3-25791	3197
41	UNIV OF DELAWARE	G S SEIDEL	HQ	D J WILKINS	NGT 00-010-022	3198
41	GEORGE WASHINGTON U	C K DRUMMOND	LERC	C A GARRIS	NAG 3-860	3214
41	GEORGE WASHINGTON U	H C NEEDLEMAN	GSFC	F BAGINSKI	NAG 5-697	3215
41	GEORGE WASHINGTON U	R L YANG	LARC		NAS 1-19699	3222
41	GEORGE WASHINGTON U	L R CLARK	LARC	H LIEBOWITZ	NCC 1-14	3224
41	GEORGE WASHINGTON U	R T BRIGHT	LARC	H LIEBOWITZ	NCC 1-24	3225
41	GEORGE WASHINGTON U	P C MURPHY	LARC	H LIEBOWITZ	NCC 1-29	3226
41	GEORGE WASHINGTON U	R L YANG	LARC	J L WHITESIDES	NCC 1-47	3227
41	GEORGE WASHINGTON U	L CREDEUR	LARC	G W LOHR	NCC 1-66	3282
41	EMBRY-RIDDLE AERO U	M G MACARAEG	LARC	C K TAM	NAG 1-1372	3292
41	FLORIDA A&M UNIV	D G FLETCHER	ARC	J A JOHNSON III	NAG 2-929	3294
41	FLORIDA A&M UNIV	A L JOHNS	LERC	A KROTHAPALLI	NAG 3-1663	3296
41	FLORIDA ATLANTIC U	J W POSEY	LARC	S A GLEGG	NAG 1-1202	3303
41	FLORIDA ATLANTIC U	J H STARNES	LARC	I ELISHAKOFF	NAG 1-1310	3304
41	FLORIDA ATLANTIC U	R A ORMISTON	ARC	G H GAONKAR	NAG 2-797	3305
41	FLORIDA ATLANTIC U	T H GUO	LERC	A DUYAR	NAG 3-1324	3308
41	FLORIDA STATE UNIV	R A GOLUB	LARC	C K TAM	NAG 1-421	3326

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	FLORIDA STATE UNIV	T A ZANG	LARC	D A KOPRIVA	NAG 1-862	3327
41	FLORIDA STATE UNIV	J M SEINER	LARC	A KROTHAPALLI	NAG 1-1497	3329
41	FLORIDA STATE UNIV	D L HUFF	LERC	K W TAM	NAG 3-1267	3331
41	UNIV OF CENTRAL FLA	S K ROBINSON	LARC	L CHEW	NAG 1-1402	3369
41	UNIV OF CENTRAL FLA	T S BARTH	KSC	W W SWART	NAG10-101	3374
41	UNIV OF CENTRAL FLA	J HODGES	KSC	S DUTCZAK	NAG10-136	3386
41	UNIV OF FLORIDA	W L SELLERS	LARC	B F CARROL	NAG 1-1486	3401
41	UNIV OF FLORIDA	L A BURKARDT	LERC	V P ROAN	NAG 3-1187	3406
41	UNIV OF FLORIDA	K TUCKER	MSFC	W SHYY	NAG 8-177	3412
41	GEORGIA INST OF TECH	R G KVATERNIK	LARC	S HANAGUD	NAG 1-1007	3515
41	GEORGIA INST OF TECH	H E HINNANT	LARC	D H HODGES	NAG 1-1094	3516
41	GEORGIA INST OF TECH	W T SUIT	LERC	A J CALISE	NAG 1-1139	3517
41	GEORGIA INST OF TECH	J D MCMINN	LARC	A J CALISE	NAG 1-1451	3525
41	GEORGIA INST OF TECH	E G WAGGONER	LARC	R J ENGLAR	NAG 1-1517	3526
41	GEORGIA INST OF TECH	R P WESTON	LARC	D P SCHRAGE	NAG 1-1564	3527
41	GEORGIA INST OF TECH	T L HOST	ARC	L N SANKAR	NAG 2-869	3534
41	GEORGIA INST OF TECH	T L GALLOWAY	ARC	D P SCHRAGE	NAG 2-900	3536
41	GEORGIA INST OF TECH	E KREJSA	LERC	K K AHUJA	NAG 3-1066	3539
41	GEORGIA INST OF TECH	H D ROSS	LERC	S MENON	NAG 3-1610	3546
41	GEORGIA INST OF TECH	L R CLARK	LARC	K AHUJA	NAS 1-19061	3572
41	GEORGIA INST OF TECH	A ATENCIO	ARC	J V PRASAD	NCA 2-512	3576
41	GEORGIA INST OF TECH	C TUNG	ARC	J C WU	NCA 2-747	3577
41	GEORGIA INST OF TECH	A ATENCIO	ARC	J V PRASAD	NCA 2-761	3578
41	GEORGIA INST OF TECH	T GALLOWAY	ARC	D P SCHRAGE	NCA 2-771	3579
41	GEORGIA INST OF TECH	G S SEIDEL	HQ	D P SCHRAGE	NGT 00-010-007	3584
41	GEORGIA INST OF TECH	J T LYNCH	HQ	D SCHRAGE	NGT 00-051-101	3594
41	GEORGIA INST OF TECH	D K RUSSELL	HQ	H STALFORD	NGT 00-070-315	3605
41	UNIV OF IDAHO	D V GALLAWAY	HQ	D H ATKINSON	NGT 00-010-003	3765
41	ILL INST OF TECH	M J WALSH	LARC	C E WARK	NAG 1-1532	3769
41	ILL INST OF TECH	R R MANKBADI	LERC	T C CORKE	NAG 3-1519	3770
41	ILL INST OF TECH	S P WILKINSON	LARC	T C CORKE	NCC 1-167	3771
41	NORTHWESTERN UNIV	P GOORJIAN	ARC	A TAFLOVE	NCA 2-561	3813
41	NORTHWESTERN UNIV	P GOORJIAN	ARC	A TAFLOVE	NCA 2-562	3814
41	NORTHWESTERN UNIV	P GOORJIAN	ARC	A TAFLOVE	NCA 2-772	3816
41	UNIV OF CHICAGO	R YEE	ARC	R A LOEWINSTEIN	NAG 2-6001	3838
41	UNIV ILLINOIS-URBANA	M J WALSH	LARC	R J ADRIAN	NAG 1-1530	3932
41	UNIV ILLINOIS-URBANA	C L STREET	LARC	S BALACHANDAR	NAG 1-1583	3934
41	UNIV ILLINOIS-URBANA	L FREUDINGER	ARC	L BERGMAN	NAG 2-4001	3945
41	UNIV ILLINOIS-URBANA	J D HOLDEMAN	LERC	S P VANKA	NAG 3-1026	3946
41	UNIV ILLINOIS-URBANA	M G POTAPCZUK	LERC	M B BRAGG	NAG 3-1134	3948
41	UNIV ILLINOIS-URBANA	Y K CHOO	LERC	K D LEE	NAG 3-1148	3949
41	UNIV ILLINOIS-URBANA	D KWAK	ARC	K D LEE	NCA 2-742	3988
41	UNIV ILLINOIS-URBANA	S E ROGERS	ARC	K D LEE	NCA 2-833	3989
41	UNIV ILLINOIS-URBANA	F MONTEGANI	LERC	M B BRAGG	NGT 00-051-051	4000
41	IND U-PURDUE-INDAPLS	R A BLECH	LERC	A ECER	NAG 3-1577	4018
41	PURDUE UNIVERSITY	R J SILCOX	LARC	R J BERNHARD	NAG 1-58	4038
41	PURDUE UNIVERSITY	R C SCOTT	LARC	T A WEISSHAAR	NAG 1-157	4039
41	PURDUE UNIVERSITY	J W EDWARDS	LARC	H T YANG	NAG 1-372	4040
41	PURDUE UNIVERSITY	T OWENS	LARC	S P SCHNEIDER	NAG 1-1133	4041
41	PURDUE UNIVERSITY	S A RIZZI	LARC	J F DOYLE	NAG 1-1173	4042
41	PURDUE UNIVERSITY	D L GRAY	LARC	S P SCHNEIDER	NAG 1-1201	4043
41	PURDUE UNIVERSITY	T S GATES	LARC	C T SUN	NAG 1-1366	4047
41	PURDUE UNIVERSITY	T B GATSKI	LARC	A BLAISDELL	NAG 1-1509	4049
41	PURDUE UNIVERSITY	S A RIZZI	LARC	J F DOYLE	NAG 1-1526	4050
41	PURDUE UNIVERSITY	J P WEIDNER	LARC	S N MURTHY	NAG 1-1601	4051
41	PURDUE UNIVERSITY	S P WILKINSON	LARC	S P SCHNEIDER	NAG 1-1607	4052
41	PURDUE UNIVERSITY	L L ERICKSON	ARC	J P SULLIVAN	NAG 2-854	4053
41	PURDUE UNIVERSITY	R J STEINKE	LERC	S N MURTHY	NAG 3-481	4054
41	PURDUE UNIVERSITY	G L STEFKO	LERC	M H WILLIAMS	NAG 3-499	4055
41	PURDUE UNIVERSITY	D HOYNIK	LERC	P S FLEETER	NAG 3-656	4057

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	PURDUE UNIVERSITY	F A NEWMAN	LERC	S FLEETER	NAG 3-825	4058
41	PURDUE UNIVERSITY	J D HOLDEMAN	LERC	J P SULLIVAN	NAG 3-943	4059
41	PURDUE UNIVERSITY	L F SCHUMANN	LERC	S FLEETER	NAG 3-1207	4061
41	PURDUE UNIVERSITY	D N BOWDITCH	LERC	S N MURTHY	NAG 3-1291	4062
41	PURDUE UNIVERSITY	H D FUHRMAN	LARC	J R SULLIVAN	NAS 1-20270	4090
41	PURDUE UNIVERSITY	G S SEIDEL	HQ	T A WEISSHAAR	NGT 00-010-004	4096
41	PURDUE UNIVERSITY	C HIX	JPL	J M LONGUSKI	NGT 00-051-129	4110
41	PURDUE UNIVERSITY	D K RUSSELL	HQ	R SKELTON	NGT 00-070-313	4114
41	UNIV OF NOTRE DAME	J SORIESKI	LARC	J E RENAUD	NAG 1-1561	4120
41	UNIV OF NOTRE DAME	L L ERICKSON	ARC	R C NELSON	NAG 2-905	4121
41	UNIV OF NOTRE DAME	J F GROENEWEG	LERC	H M ATASSI	NAG 3-732	4122
41	UNIV OF NOTRE DAME	L B SCHIFF	ARC	A S ARENA	NCA 2-621	4131
41	UNIV OF NOTRE DAME	L VERNON	ARC	P F DUNN	NCA 2-711	4132
41	UNIV OF NOTRE DAME	D FISHER	ARC	R C NELSON	NCA 2-730	4133
41	UNIV OF NOTRE DAME	L VERNON	ARC	S M BATILL	NCA 2-753	4134
41	UNIV OF NOTRE DAME	L VERNON	ARC	P F DUNN	NCA 2-770	4135
41	UNIV OF NOTRE DAME	L E PUTNAM	LARC	S M BATILL	NCC 1-177	4136
41	UNIV OF NOTRE DAME	D F FISHER	ARC	R C NELSON	NCC 2-5056	4137
41	UNIV OF NOTRE DAME	D J KOGA	ARC	W J COOK	NAG 2-715	4148
41	IOWA STATE UNIV	T A EDWARDS	ARC	J C TANNEHILL	NAG 2-776	4149
41	IOWA STATE UNIV	L REID	LERC	T H OKLISHI	NAG 3-1075	4152
41	IOWA STATE UNIV	K L SUDER	LERC	T H OKIISHI	NAG 3-1302	4153
41	IOWA STATE UNIV	M D HATHAWAY	LERC	T H OKIISHI	NAG 3-1427	4156
41	IOWA STATE UNIV	B A REICHERT	LERC	T H OKIISHI	NAG 3-1561	4158
41	IOWA STATE UNIV	F C OWENS	HQ	B L PIERSON	NGT 00-050-637	4175
41	IOWA STATE UNIV	E PRIOR	LARC	A ROTHMAYER	NGT 00-051-009	4180
41	IOWA STATE UNIV	D K RUSSELL	HQ	P LU	NGT 00-070-305	4184
41	IOWA STATE UNIV	D K RUSSELL	HQ	B PIERSON	NGT 00-070-347	4185
41	IOWA STATE UNIV	R K GREIF	ARC	P J GORDER	NCC 2-871	4245
41	KANSAS STATE UNIV	F W BURCHAM	ARC	J ROSKAM	NAG 2-789	4247
41	UNIV OF KANSAS	K K GUPTA	ARC	J E LOCKE	NCA 2-766	4263
41	UNIV OF KANSAS	D L CLER	LARC	S FAROKHI	NCC 1-172	4264
41	UNIV OF KANSAS	J GERA	ARC	D R DOWNING	NCC 2-588	4265
41	UNIV OF KANSAS	E W AIKEN	ARC	D R DOWNING	NCC 2-805	4266
41	UNIV OF KANSAS	J M ABBOTT	LERC	R TAGHAVI	NCC 3-251	4267
41	UNIV OF KANSAS	T K O'BRIEN	LARC	S J HOOPER	NAG 1-1488	4278
41	WICHITA STATE UNIV	G S BIDWELL	LERC	G W ZUMWALT	NAG 3-566	4279
41	WICHITA STATE UNIV	B J HOLMES	LARC	D R ELLIS	NCC 1-195	4281
41	WICHITA STATE UNIV	T H BOND	LERC	D R ELLIS	NCC 3-347	4282
41	WICHITA STATE UNIV	G S SEIDEL	HQ	K ROKHSAZ	NGT 00-010-026	4283
41	WICHITA STATE UNIV	J R SCHWAB	LERC	S ACHARYA	NAG 3-1641	4311
41	LA ST U&A&M COL-BRGE	D F NOGA	LERC	D MOREMAN	NAG 3-1662	4348
41	SO UNIV & A&M COL-BR	I M BLANKSON	HQ	V T MONTGOMERY	NAGW 3882	4351
41	SO UNIV & A&M COL-BR	K THOMPSON	KSC	R M DIWAN	NAG10-127	4353
41	SO UNIV & A&M COL-BR	D VITABLANO	GSFC	W MOOS	NAS 5-30403	4492
41	JOHNS HOPKINS UNIV	G S SEIDEL	HQ	C J SCOTT	NGT 00-010-005	4507
41	MORGAN STATE UNIV	T A ZANG	LARC	U PIOMELLI	NAG 1-1089	4521
41	UNIV MARYLAND-COL PK	S BAUER	LARC	J D ANDERSON	NAG 1-1192	4522
41	UNIV MARYLAND-COL PK	W T YEAGER	LARC	I CHOPRA	NAG 1-1253	4523
41	UNIV MARYLAND-COL PK	A KUMAR	LARC	M J LEWIS	NAG 1-1333	4525
41	UNIV MARYLAND-COL PK	G B NORTHAM	LARC	J D ANDERSON	NAG 1-1384	4526
41	UNIV MARYLAND-COL PK	M J WALSH	LARC	J M WALLACE	NAG 1-1528	4529
41	UNIV MARYLAND-COL PK	L M GREGORY	LARC	D K SCHMIDT	NAG 1-1540	4530
41	UNIV MARYLAND-COL PK	K Q NGUYEN	ARC	I CHOPRA	NAG 2-409	4533
41	UNIV MARYLAND-COL PK	M B TISCHLER	ARC	R CELI	NAG 2-793	4537
41	UNIV MARYLAND-COL PK	M B TISCHLER	ARC	W S LEVINE	NAG 2-794	4538
41	UNIV MARYLAND-COL PK	S R KOTTAPALLI	ARC	I CHOPRA	NAG 2-889	4540
41	UNIV MARYLAND-COL PK	C KITAPLIOGLU	ARC	J D BAEDER	NAG 2-898	4541
41	UNIV MARYLAND-COL PK	T M SANDERS	LERC	A K GUPTA	NAG 3-1488	4545
41	UNIV MARYLAND-COL PK	S GARG	LERC	D K SCHMIDT	NAG 3-1575	4546

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	UNIV MARYLAND-COL PK	T D SWANSON	GSFC	K E HEROLD	NAG 5-1933	4575
41	UNIV MARYLAND-COL PK	D CROSBY	GSFC	S GLOECKLER	NAS 5-30370	4676
41	UNIV MARYLAND-COL PK	J BOWLES	ARC	M J LEWIS	NCA 2-611	4684
41	UNIV MARYLAND-COL PK	G S DEIWERT	ARC	M J LEWIS	NCA 2-624	4685
41	UNIV MARYLAND-COL PK	W G WARMBRODT	ARC	I CHOPRA	NCC 2-829	4686
41	UNIV MARYLAND-COL PK	P MOIN	ARC	J M WALLACE	NCC 2-5003	4687
41	UNIV MARYLAND-COL PK	J BOWLES	ARC	M J LEWIS	NCC 2-5010	4688
41	UNIV MARYLAND-COL PK	R A GUALDONI	HQ	D L AKIN	NCCW 38	4698
41	BOSTON UNIVERSITY	G L MCANINCH	LARC	A D PIERCE	NAG 1-1580	4736
41	MASS INST OF TECH	R C MONTGOMERY	LARC	W E VANDERVELDE	NAG 1-126	4857
41	MASS INST OF TECH	J H STARNES	LARC	P A LAGACE	NAG 1-991	4860
41	MASS INST OF TECH	B J BACON	LARC	L VALAVANI	NAG 1-1088	4861
41	MASS INST OF TECH	J D BERRY	LARC	S R HALL	NAG 1-1299	4863
41	MASS INST OF TECH	J M SEINER	LARC	I A WAITZ	NAG 1-1511	4866
41	MASS INST OF TECH	C H GERHOLD	LARC	I A WAITZ	NAG 1-1512	4867
41	MASS INST OF TECH	K R MEADOWS	LARC	R R ROSALES	NAG 1-1519	4868
41	MASS INST OF TECH	S K ROBINSON	LARC	K S BREYER	NAG 1-1525	4869
41	MASS INST OF TECH	C A POWELL	LARC	R J HANSMAN JR.	NAG 1-1531	4870
41	MASS INST OF TECH	S J MORRIS	LARC	R W SIMPSON	NAG 1-1577	4871
41	MASS INST OF TECH	K S BEY	LARC	J PERAIRE	NAG 1-1587	4872
41	MASS INST OF TECH	L L ERIKSON	ARC	M DRELA	NAG 2-853	4882
41	MASS INST OF TECH	K GUPTA	ARC	J PERAIRE	NAG 2-4002	4885
41	MASS INST OF TECH	R J GEENEN	GSFC	M DRELA	NAG 2-4008	4886
41	MASS INST OF TECH	J J ADAMCZYK	LERC	E E COVERT	NAG 3-660	4887
41	MASS INST OF TECH	M G POTAPCZUK	LERC	R J HANSMAN	NAG 3-666	4888
41	MASS INST OF TECH	P L MEITNER	LERC	G S TAN	NAG 3-772	4890
41	MASS INST OF TECH	J J ADAMCZYK	LERC	E M GREITZER	NAG 3-844	4891
41	MASS INST OF TECH	J J REINMANN	LERC	R J HANSMAN	NAG 3-927	4892
41	MASS INST OF TECH	C DRUMMOND	LERC	C S TAN	NAG 3-953	4893
41	MASS INST OF TECH	A J STRAZISAR	LERC	A H EPSTEIN	NAG 3-1013	4894
41	MASS INST OF TECH	J J ADAMCZYK	LERC	C S TAN	NAG 3-1176	4896
41	MASS INST OF TECH	J D HEIDMANN	LERC	A H EPSTEIN	NAG 3-1214	4897
41	MASS INST OF TECH	G J SKOCH	LERC	E M GREITZER	NAG 3-1237	4898
41	MASS INST OF TECH	C K DRUMMOND	LERC	I A WAITZ	NAG 3-1364	4900
41	MASS INST OF TECH	M G POTAPCZUK	LERC	M DRELA	NAG 3-1443	4902
41	MASS INST OF TECH	C K DRUMMOND	LERC	A H EPSTEIN	NAG 3-1448	4903
41	MASS INST OF TECH	A J STRAZISAR	LERC	E M GREITZER	NAG 3-1513	4906
41	MASS INST OF TECH	C K DRUMMOND	LERC	C S TAN	NAG 3-1567	4907
41	MASS INST OF TECH	M MIZUKAMI	LERC	C S TAN	NAG 3-1591	4908
41	MASS INST OF TECH	S H GOLDSTEIN	JSC	J L KERREBROCK	NAG 9-694	4972
41	MASS INST OF TECH	G STOVER	LARC	E CRAWLEY	NAS 1-19622	5037
41	MASS INST OF TECH	J HEEG	LARC	E F CRAWLEY	NCC 1-157	5056
41	MASS INST OF TECH	J BURKEN	ARC	J D PADUANO	NCC 2-4001	5059
41	MASS INST OF TECH	R T CHEN	ARC	N D HAM	NCC 2-5018	5060
41	MASS INST OF TECH	S A APP	LERC	J L KERREBROCK	NCC 3-265	5062
41	MASS INST OF TECH	C J MAREK	LERC	I A WAITZ	NCC 3-307	5063
41	MASS INST OF TECH	F R MORRELL	LARC	R W SIMPSON	NGL22-9640	5064
41	MASS INST OF TECH	G S SEIDEL	HQ	E M MURMAN	NGT 00-010-010	5066
41	MASS INST OF TECH	S GOLDSTEIN	JSC	D J NEWMAN	NGT 00-051-228	5082
41	TUFTS UNIVERSITY	M J WALSH	LARC	C ROGERS	NAG 1-1523	5097
41	UNIV OF MASS-LOWELL	C L JOHNSON	MSFC	B W REINISCH	NAG 8-1055	5102
41	MICHIGAN STATE UNIV	L M WEINSTEIN	LARC	R E FALCO	NAG 1-1106	5163
41	MICHIGAN STATE UNIV	P H MIRICK	LARC	P M FITZSIMONS	NCC 1-175	5173
41	UNIV MICH-ANN ARBOR	M J SHUART	LARC	A M WAAS	NAG 1-1040	5196
41	UNIV MICH-ANN ARBOR	R W GUY	LARC	T C ADAMSON	NAG 1-1290	5198
41	UNIV MICH-ANN ARBOR	K S BRENTNER	LARC	P L ROE	NAG 1-1514	5207
41	UNIV MICH-ANN ARBOR	T E MOORE	MSFC	T GOMBOSI	NAG 8-141	5251
41	UNIV MICH-ANN ARBOR	R MACHIN	JSC	A GALLIMORE	NAG 9-709	5256
41	UNIV MICH-ANN ARBOR	P B RUSSELL	ARC	J VESECKY	NCA 2-681	5315
41	UNIV MICH-ANN ARBOR	B SRIDHAR	ARC	N H MCCCLAMROCH	NCC 2-573	5318

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	UNIV MICH-ANN ARBOR	G S SEIDEL	HQ	J G EISLEY	NGT 00-010-023	5324
41	UNIV MICH-ANN ARBOR	B HASTINGS	ARC	P ROE	NGT 00-050-931	5334
41	UNIV MICH-ANN ARBOR	F MONTEGANI	LERC	K G POWELL	NGT 00-051-235	5343
41	UNIV MICH-ANN ARBOR	L EVANS	LARC	A M WAAS	NGT 00-051-256	5344
41	UNIV MICH-ANN ARBOR	L EVANS	LARC	T C ANDERSON	NGT 00-051-260	5345
41	WAYNE STATE UNIV	L MAESTRELLO	LARC	P L CHOW	NAG 1-1175	5350
41	WAYNE STATE UNIV	R R TACINA	LERC	M C LAI	NAG 3-1140	5352
41	WESTERN MICHIGAN U	D E ASHPIS	LERC	D J DORNEY	NAG 3-1668	5359
41	WESTERN MICHIGAN U	J R SCHWAB	LERC	D J DORNEY	NAG 3-1671	5361
41	U MINN-MNPLS-ST PAUL	B J BACON	LARC	W L GARRARD	NAG 1-1380	5369
41	U MINN-MNPLS-ST PAUL	L R HUNT	LARC	G V CANDLER	NAG 1-1470	5370
41	U MINN-MNPLS-ST PAUL	K SUTTON	LARC	G V CANDLER	NAG 1-1498	5371
41	U MINN-MNPLS-ST PAUL	K R MEADOWS	LARC	A S LYRINTZIS	NAG 1-1605	5372
41	U MINN-MNPLS-ST PAUL	J R SCHWAB	LERC	S V PATANKAR	NAG 3-1638	5379
41	U MINN-MNPLS-ST PAUL	R T CHEN	ARC	Y ZHAO	NCC 2-809	5412
41	U MINN-MNPLS-ST PAUL	R A SLATTERY	ARC	Y ZHAO	NCC 2-868	5413
41	U MINN-MNPLS-ST PAUL	N N MANSOUR	ARC	T S LUNDGREN	NCC 2-5017	5414
41	U MINN-MNPLS-ST PAUL	H S LEE	LERC	S V PATANKAR	NCC 3-238	5415
41	U MINN-MNPLS-ST PAUL	M MOORE	ARC	A LYNN TZIS	NGT 00-051-169	5428
41	UNIV OF MINN-DULUTH	G S DEIWERT	ARC	G V CANDLER	NCA 2-819	5434
41	MISSISSIPPI STATE U	F C THAMES	LARC	D L WHITFIELD	NAG 1-226	5437
41	MISSISSIPPI STATE U	D W BARTLETT	LARC	M J JANUS	NAG 1-1271	5438
41	MISSISSIPPI STATE U	J W POSEY	LARC	D L WHITFIELD	NAG 1-1369	5439
41	MISSISSIPPI STATE U	D J BAKER	LARC	M RAIS-ROHANI	NAG 1-1571	5440
41	MISSISSIPPI STATE U	D HOYNIK	LERC	D L WHITFIELD	NAG 3-767	5442
41	MISSISSIPPI STATE U	J M SANZ	LERC	D WHITFIELD	NAG 3-869	5443
41	MISSISSIPPI STATE U	G L STEFKO	LERC	D L WHITFIELD	NAG 3-983	5444
41	MISSISSIPPI STATE U	D L HUFF	LERC	J M JANUS	NAG 3-1228	5445
41	MISSISSIPPI STATE U	J P VERES	LERC	D L WHITFIELD	NAG 3-1357	5446
41	MISSISSIPPI STATE U	G S SEIDEL	HQ	J C MCWHORTER	NGT 00-010-011	5457
41	UNIV MO-COLUMBIA	B W WEBBON	ARC	J B MILES	NAG 2-589	5483
41	UNIV MO-COLUMBIA	R JUDAY	JSC	J KNOPP	NAG 9-404	5490
41	UNIV MO-COLUMBIA	R JUDAY	JSC	J KNOPP	NAG 9-606	5492
41	UNIV MO-ROLLA	C R MCCLINTON	LARC	D W RIGGINS	NAG 1-1189	5498
41	UNIV MO-ROLLA	R M BENNETT	LARC	F FINAISH	NAG 1-1482	5499
41	UNIV MO-ROLLA	C MCCLINTON	LARC	D RIGGINS	NGT 00-051-338	5505
41	WASHINGTON UNIVERSTY	H M ADELMAN	LARC	D A PETERS	NAG 1-1373	5508
41	WASHINGTON UNIVERSTY	R A ORMISTON	ARC	D A PETERS	NAG 2-728	5509
41	MONTANA STATE UNIV	J LAUB	ARC	A DEMETRIADES	NCC 2-5009	5565
41	UNIV NEBRASKA-LINCLN	K K GUPTA	ARC	C W MARTIN	NCA 2-762	5600
41	UNIV OF NEVADA-RENO	D P BENCZE	ARC	W C ROSE	NCC 2-507	5619
41	PRINCETON UNIVERSITY	J W FLETCHER	ARC	H C CURTISS	NAG 2-561	5720
41	PRINCETON UNIVERSITY	S E CLIFF-HOVEY	ARC	T J BAKER	NAG 2-784	5721
41	PRINCETON UNIVERSITY	S E CLIFF	ARC	T J BAKER	NAG 2-928	5722
41	PRINCETON UNIVERSITY	R NIEDZWIECKI	LERC	F DRYER	NAG 3-1587	5728
41	PRINCETON UNIVERSITY	F R MORRELL	LARC	R F STENGEL	NGL31-1252	5772
41	RUTGERS ST U-N BRNSK	T J COAKLEY	ARC	D D KNIGHT	NAG 2-798	5788
41	RUTGERS ST U-N BRNSK	G H KIDWELL	ARC	S AMAREL	NAG 2-817	5789
41	RUTGERS ST U-PISCTWY	D H RUDY	LARC	R B PELZ	NAG 1-1559	5803
41	NM HIGHLANDS UNIV	J DEL FRATE	ARC	G R GALLEGOS	NAG 2-4004	5819
41	NEW MEX ST U-LAS CR	K HENDERSON	JSC	G R PARKER	NAG 9-610	5843
41	NEW MEX ST U-LAS CR	D WILLIAMS	GSFC	UNAVAILABLE	NAS 5-30105	5853
41	NEW MEX ST U-LAS CR	W W WEST	WFF	K LANE	NAS 5-31688	5856
41	CITY U OF NY CTY COL	M G MACARAEG	LARC	A ACRIVOS	NAG 1-1159	5895
41	CITY U OF NY CTY COL	D M BUSHNELL	LARC	C WATKINS	NAG 1-1590	5897
41	CLARKSON UNIVERSITY	S O KJELGAARD	LARC	M N	NAG 1-1481	5912
41	CLARKSON UNIVERSITY	E M HAMLIN	ARC	M N GLAUSER	NAG 2-724	5913
41	CLARKSON UNIVERSITY	F C OWENS	HQ	G AHMADI	NGT 00-050-825	5925
41	CLARKSON UNIVERSITY	M MOORE	ARC	G AHMADI	NGT 00-051-314	5929
41	COOPER UNION	G S SEIDEL	HQ	J LE MEE	NGT 00-010-009	6008

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	CORNELL UNIVERSITY	D R HOAD	LARC	A R GEORGE	NAG 1-1396	6011
41	CORNELL UNIVERSITY	J P DRUMMOND	LARC	S B POPE	NAG 1-1542	6012
41	CORNELL UNIVERSITY	J M SEINER	LARC	J L LUMLEY	NAG 1-1543	6013
41	CORNELL UNIVERSITY	C KITAPLIOGLU	ARC	A R GEORGE	NAG 2-554	6015
41	CORNELL UNIVERSITY	W J CHYU	ARC	D A CAUGHEY	NAG 2-665	6017
41	CORNELL UNIVERSITY	F A NEWMAN	LERC	F K MOORE	NAG 3-349	6023
41	CORNELL UNIVERSITY	F A NEWMAN	LERC	E L RESLER	NAG 3-1069	6025
41	CORNELL UNIVERSITY	C M LEE	LERC	Z L RESLER	NAG 3-1114	6026
41	CORNELL UNIVERSITY	L A POVINELLI	LERC	J LUMLEY	NAG 3-1570	6030
41	CORNELL UNIVERSITY	G S DEIWERT	ARC	I BOYD	NCA 2-820	6095
41	POLYTECHNIC U	W R HINGST	LERC	I M KALKHORAN	NAG 3-1378	6143
41	POLYTECHNIC U	Y M YU	ARC	M P ISOM	NCC 2-172	6148
41	RENSSELAER POLY-NY	L P YIP	LARC	B E THOMPSON	NAG 1-1520	6154
41	RENSSELAER POLY-NY	T A LASINSKI	ARC	M S SHEPPARD	NAG 2-832	6155
41	RENSSELAER POLY-NY	L BERKE	LERC	P HAJELA	NAG 3-1196	6157
41	RENSSELAER POLY-NY	C J MAREK	LERC	H T NAGAMATSN	NAG 3-1375	6158
41	RENSSELAER POLY-NY	G S SEIDEL	HQ	G A GABRIELE	NGT 00-010-017	6179
41	RENSSELAER POLY-NY	F MONTEGANI	LERC	L N MYRABO	NGT 00-051-049	6182
41	RENSSELAER POLY-NY	E J PRIOR	LARC	Z RUSAK	NGT 00-051-113	6183
41	STATE U NY-BINGHAMTN	S A RIZZI	LARC	R N MILES	NAG 1-1406	6221
41	STATE UNIV NY-BUFFAL	J J ADAMCZYK	LERC	D B TAULBEE	NAG 3-962	6231
41	STATE UNIV NY-BUFFAL	G S SEIDEL	HQ	C L BLOEBAUM	NGT 00-010-019	6243
41	SYRACUSE UNIVERSITY	W T YEAGER	LARC	V R MURTHY	NAG 1-759	6295
41	SYRACUSE UNIVERSITY	J P VERES	LERC	T Q DANG	NAG 3-1468	6300
41	SYRACUSE UNIVERSITY	D P MILLER	LERC	T Q DANG	NAG 3-1585	6301
41	DUKE UNIVERSITY	S R COLE	LARC	E H DOWELL	NAG 1-1569	6325
41	DUKE UNIVERSITY	R J SILCOX	LARC	R L CLARK	NAG 1-1570	6326
41	DUKE UNIVERSITY	D HOYNIK	LERC	K HALL	NAG 3-1433	6328
41	NO CAR A&T STATE U	T B GATSKI	LARC	S CHANDRA	NAG 1-1287	6361
41	NO CAROLINA STATE U	J E HARRIS	LARC	H A HASSAN	NAG 1-244	6377
41	NO CAROLINA STATE U	R E SMITH	LARC	D S MCRAE	NAG 1-1340	6382
41	NO CAROLINA STATE U	R J SILCOX	LARC	H T BANKS	NAG 1-1600	6384
41	NO CAROLINA STATE U	E A KREJSA	LERC	R T NAGEL	NAG 3-855	6386
41	NO CAROLINA STATE U	J E HARRIS	LARC	H A HASSAN	NCC 1-22	6405
41	NO CAROLINA STATE U	E V ZOBY	LARC	F R DEJARNETTE	NCC 1-100	6406
41	NO CAROLINA STATE U	K SUTTON	LARC	H A HASSAN	NCC 1-112	6407
41	NO CAROLINA STATE U	K SUTTON	LARC	G V CANDLER	NCC 1-140	6408
41	NO CAROLINA STATE U	J S HILL	LARC	F R DEJARNETTE	NCC 1-141	6409
41	NO CAROLINA STATE U	L P YIP	LARC	J N PERKINS	NCC 1-154	6410
41	NO CAROLINA STATE U	P L COE	LARC	J N PERKINS	NCC 1-162	6411
41	NO CAROLINA STATE U	J A AL-SAAD	LARC	N CHOKANI	NCC 1-169	6413
41	NO CAROLINA STATE U	P A GNOFFO	LARC	G D WALBERG	NCC 1-170	6414
41	NO CAROLINA STATE U	S P WILKINSON	LARC	N CHEKANI	NCC 1-183	6415
41	NO CAROLINA STATE U	E PRIOR	LARC	G V CANDLER	NGT 00-051-005	6422
41	NO CAROLINA STATE U	L EVANS	LARC	D S MCRAE	NGT 00-051-189	6423
41	NO CAROLINA STATE U	L EVANS	LARC	F YUAN	NGT 00-051-248	6424
41	CASE WESTERN RESERVE	J D SAUNDERS	LERC	E RESHOTKO	NAG 3-1130	6481
41	CASE WESTERN RESERVE	F A NEWMAN	LERC	F E MCCAUGHAN	NAG 3-1179	6484
41	CASE WESTERN RESERVE	C F LORENZO	LERC	S M PHILLIPS	NAG 3-1232	6487
41	CASE WESTERN RESERVE	W R HINGST	LERC	M MEHREGANY	NAG 3-1273	6488
41	CASE WESTERN RESERVE	C K DRUMMOND	LERC	F E MCCAUGHAN	NAG 3-1337	6491
41	CASE WESTERN RESERVE	J K LYTLE	LERC	I GREEBER	NAG 3-1541	6501
41	CASE WESTERN RESERVE	L A POVINELLI	LERC	E RESHOTKO	NCC 3-124	6520
41	CASE WESTERN RESERVE	J J ADAMCZYK	LERC	J R KADAMBF	NCC 3-263	6536
41	CENTRAL ST UNIV-OHIO	R R TACINA	LERC	C B OKHIO	NAG 3-1670	6576
41	CLEVELAND STATE UNIV	K S CHUN	LERC	B GHORASHI	NAG 3-1010	6582
41	CLEVELAND STATE UNIV	D R HULL	LERC	S N TEWARI	NCC 3-111	6602
41	CUYAHOGA COMMUNITY C	F H YARRIS	LERC	B L CANEPARI	NCC 3-185	6639
41	LORAIN CNTY COM COL	F H YARRIS	LERC	J COLE	NCC 3-184	6653
41	OHIO STATE UNIV	C M BELCASTRO	LARC	R K YEDAVALLI	NAG 1-1164	6658

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	OHIO STATE UNIV	M G MACARAEG	LARC	R J BODONYI	NAG 1-1555	6660
41	OHIO STATE UNIV	R E COLTRIN	LERC	J D LEE	NAG 3-986	6665
41	OHIO STATE UNIV	E A KREJSA	LERC	J N SCOTT	NAG 3-1058	6666
41	OHIO STATE UNIV	T P RATVASKY	LERC	G M GREGOREK	NAG 3-1574	6682
41	OHIO STATE UNIV	W A ORAN	HQ	H MOELLERING	NAGW 973	6698
41	OHIO STATE UNIV	K CORKER	ARC	D D WOODS	NCC 2-592	6718
41	OHIO STATE UNIV	J K RAMSEY	LERC	J D LEE	NCC 3-198	6720
41	OHIO STATE UNIV	D A HOLLAND	HQ	M R FOSTER	NGT 00-051-072	6726
41	UNIV OF AKRON	S M ARNOLD	LERC	D N ROBINSON	NAG 3-379	6742
41	UNIV OF AKRON	S M ARNOLD	LERC	H Q TAN	NAG 3-872	6743
41	UNIV OF AKRON	S M ARNOLD	LERC	T P CHANG	NAG 3-901	6744
41	UNIV OF AKRON	S M ARNOLD	LERC	W K BINIENDA	NAG 3-1223	6749
41	UNIV OF AKRON	K J MELCHER	LERC	T T HARTLEY	NAG 3-1450	6757
41	UNIV OF AKRON	S M ARNOLD	LERC	A F SALEEB	NAG 3-1493	6759
41	UNIV OF AKRON	S M ARNOLD	LERC	H TAN	NAG 3-1551	6763
41	UNIV OF AKRON	M S LIOU	LERC	B P LEONARD	NCC 3-178	6770
41	UNIV OF AKRON	J H STARNES	LARC	G J SIMITSES	NAG 1-1280	6782
41	UNIV OF CINCINNATI	J J KORTE	LARC	S G RUBIN	NAG 1-1553	6784
41	UNIV OF CINCINNATI	J J ADAMCZYK	LERC	S G RUBIN	NAG 3-397	6785
41	UNIV OF CINCINNATI	C C CHAMIS	LERC	A H NAYFEH	NAG 3-1173	6787
41	UNIV OF CINCINNATI	L BERKE	LERC	A H NAYFEH	NAG 3-1174	6788
41	UNIV OF CINCINNATI	C C CHAMIS	LERC	A H NAYFEH	NAG 3-1175	6789
41	UNIV OF CINCINNATI	T J BENSON	LERC	S G RUBIN	NAG 3-1178	6790
41	UNIV OF CINCINNATI	J D SAUNDERS	LERC	A HAMED	NAG 3-1213	6792
41	UNIV OF CINCINNATI	D R REDDY	LERC	P D ORKWIS	NAG 3-1472	6794
41	UNIV OF CINCINNATI	C C CHAMIS	LERC	A H NAYFEH	NAG 3-1527	6795
41	UNIV OF CINCINNATI	G FOLLEN	LERC	B WALKER	NAG 3-1546	6796
41	UNIV OF CINCINNATI	S H GOLDSTEIN	JSC	T W WILLIAMS	NAG 9-717	6800
41	UNIV OF CINCINNATI	L C FREUDINGER	ARC	S J SHELLEY	NCA 2-831	6806
41	UNIV OF CINCINNATI	P C MURPHY	LARC	B K WALKER	NCC 1-181	6807
41	UNIV OF CINCINNATI	T J DAVIS	ARC	G L SLATER	NCC 2-669	6808
41	UNIV OF CINCINNATI	D KWAK	ARC	K N GHIA	NCC 2-5096	6809
41	UNIV OF CINCINNATI	L D NICHOLS	LERC	A HAMED	NCC 3-237	6811
41	UNIV OF CINCINNATI	D L BULZAN	LERC	S JENG	NCC 3-282	6813
41	UNIV OF CINCINNATI	G S SEIDEL	HQ	A HAMED	NGT 00-010-021	6817
41	UNIV OF CINCINNATI	F SIX	MSFC	S M JENG	NGT 00-051-202	6821
41	UNIV OF CINCINNATI	F MONTEGANI	LERC	B WALKER	NGT 00-051-320	6823
41	UNIV OF TOLEDO	M VARGAS	LERC	K J DEWITT	NAG 3-72	6834
41	UNIV OF TOLEDO	G L STEFKO	LERC	T G KEITH	NAG 3-742	6837
41	UNIV OF TOLEDO	G L STEFKO	LERC	T G KEITH	NAG 3-1068	6839
41	UNIV OF TOLEDO		LERC	T G KEITH JR	NAG 3-1137	6840
41	UNIV OF TOLEDO	R W CLAUS	LERC	T G KEITH	NAG 3-1219	6842
41	UNIV OF TOLEDO	D C JANETZKE	LERC	T G KEITH	NAG 3-1230	6843
41	UNIV OF TOLEDO	A P KURKOU	LERC	T G KEITH	NAG 3-1234	6844
41	UNIV OF TOLEDO	T H BOND	LERC	K C MASIULANIEC	NAG 3-1276	6846
41	UNIV OF TOLEDO	G L STEFKO	LERC	T G KEITH JR.	NAG 3-1449	6851
41	UNIV OF TOLEDO	L H FISHBACH	LERC	K J DEWITT	NCC 3-193	6870
41	UNIV OF TOLEDO	G J FOLLEN	LERC	A A AFJEH	NCC 3-207	6871
41	UNIV OF TOLEDO	G L STEFKO	LERC	T G KEITH	NCC 3-247	6873
41	UNIV OF TOLEDO	S M ARNOLD	LERC	T WILT	NCC 3-248	6874
41	UNIV OF TOLEDO	G L STEFKO	LERC	T G KEITH	NCC 3-332	6879
41	UNIV OF TOLEDO	K K GUPTA	ARC	A ARENA	NCC 2-5021	6889
41	OKLAHOMA STATE UNIV	M J LOGAN	LARC	D E SMITH	NAG 1-1643	6894
41	UNIV OKLAHOMA-NORMAN	R J GUNDERMAN	LERC	R K CRANE	NAS 3-26957	6905
41	UNIV OKLAHOMA-NORMAN	A J OSTROFF	LARC	R R MOHLER	NAG 1-1081	6914
41	OREGON STATE UNIV	J H STARNES	LARC	T C KENNEDY	NAG 1-1620	6917
41	OREGON STATE UNIV	P A GNOFFO	LARC	C F HANSEN	NAG 1-1427	6965
41	UNIV OREGON-EUGENE	W J CHYU	ARC	T SHIH	NAG 2-709	6977
41	CARNEGIE-MELLON UNIV	R J ROELKE	LERC	T I SHIH	NAG 3-929	6979
41	CARNEGIE-MELLON UNIV	W J CHYU	ARC	T I SHIH	NCC 2-845	6995

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	CARNEGIE-MELLON UNIV	W J CHYU	ARC	T I SHIH	NCC 2-5057	6996
41	DREXEL UNIVERSITY	M R WASZAK	LARC	R FISCHL	NAG 1-1102	7013
41	DREXEL UNIVERSITY	M J RABINOWITZ	LERC	D L MILLER	NAG 3-1117	7018
41	DREXEL UNIVERSITY	R R TACINA	LERC	K J CHOI	NAG 3-1421	7020
41	LEHIGH UNIVERSITY	L A POVINELLI	LERC	J D WALKER	NAG 3-1578	7031
41	PENN STATE U-UNIV PK	J M SEINER	LARC	P J MORRIS	NAG 1-1047	7044
41	PENN STATE U-UNIV PK	G L MCANINCH	LARC	A D PIERCE	NAG 1-1365	7048
41	PENN STATE U-UNIV PK	J W POSEY	LARC	L N LONG	NAG 1-1367	7049
41	PENN STATE U-UNIV PK	L M WEINSTEIN	LARC	G S SETTLES	NAG 1-1412	7053
41	PENN STATE U-UNIV PK	W E ZORUMSKI	LARC	P J MORRIS	NAG 1-1479	7056
41	PENN STATE U-UNIV PK	G L MCANINCH	LARC	V W SPARROW	NAG 1-1638	7061
41	PENN STATE U-UNIV PK	C C HORSTMAN	ARC	G S SETTLES	NAG 2-781	7063
41	PENN STATE U-UNIV PK	R J BOYLE	LERC	B LAKSHMINARAYANA	NAG 3-555	7066
41	PENN STATE U-UNIV PK	P F PENKO	LERC	C L MERKLE	NAG 3-1020	7069
41	PENN STATE U-UNIV PK	P M SOCKOL	LERC	B LAKSHMINARAYANA	NAG 3-1168	7072
41	PENN STATE U-UNIV PK	A J STRAZISAR	LERC	B LAKSHMINARAYANA	NAG 3-1222	7073
41	PENN STATE U-UNIV PK	B H ANDERSON	LERC	H MCDONALD	NAG 3-1485	7080
41	PENN STATE U-UNIV PK	E A KREJSA	LERC	I S DAS	NAG 3-1563	7082
41	PENN STATE U-UNIV PK	P L MURTHY	LERC	A D BELEGUNDU	NAG 3-1590	7084
41	PENN STATE U-UNIV PK	M ROCKER	MSFC	V YANG	NAG 8-136	7118
41	PENN STATE U-UNIV PK	J VARGAS	MSFC	R CORBIN	NAG 8-288	7121
41	PENN STATE U-UNIV PK	G A WILHOLD	MSFC	R J SANTORO	NAS 8-38862	7164
41	PENN STATE U-UNIV PK	L GRIFFIN	MSFC	B LAKSHMINARAYANA	NAS 8-38867	7165
41	PENN STATE U-UNIV PK	J BOWLES	ARC	G S DULIKRAVICH	NCA 2-769	7169
41	PENN STATE U-UNIV PK	H P TRINH	MSFC	R J SANTORO	NCC 8-46	7172
41	PENN STATE U-UNIV PK	G S SEIDEL	HQ	G S DULIKRAVICH	NGT 00-010-006	7174
41	PENN STATE U-UNIV PK	J T LYNCH	HQ	G KOODMANN	NGT 00-051-106	7188
41	PENN STATE U-UNIV PK	E PRIOR	LARC	L N LONG	NGT 00-051-118	7189
41	BROWN UNIVERSITY	H L ATKINS	LARC	C W SHU	NAG 1-1145	7259
41	BROWN UNIVERSITY	T B GATSKI	LARC	L SIROVICH	NAG 1-1230	7260
41	BROWN UNIVERSITY	M D DAHL	LERC	J T LIU	NAG 3-1484	7262
41	CLEMSON UNIV-CLEMSON	M J SHUART	LARC	S B BIGGERS	NAG 1-1141	7336
41	CLEMSON UNIV-CLEMSON	G S SEIDEL	HQ	G M FADEL	NGT 00-010-008	7354
41	UNIV OF SOUTH DAKOTA	J M SKULTETY	ARC	M M GRANAAS	NAG 2-492	7392
41	CHRISTIAN BROS COL	J P BUTAS	MSFC	L N SANTI	NAG 8-1024	7393
41	TENNESSEE STATE UNIV	R F LAWRENCE	LERC	D B ROGERS	NAG 3-1171	7408
41	TENNESSEE STATE UNIV	T GUO	LERC	M S ZEIN-SABATTO	NAG 3-1471	7409
41	UNIV TENNESSEE-KNOXV	C L BURLEY	LARC	J S STEINHOFF	NAG 1-1368	7425
41	UNIV TENNESSEE-KNOXV	R D JOSLIN	LARC	J M WU	NAG 1-1612	7427
41	UNIV TENNESSEE-KNOXV	L S KING	ARC	C F LO	NAG 2-881	7428
41	UNIV TENNESSEE-KNOXV	D L HUFF	LERC	J CARUTHERS	NAG 3-1516	7431
41	UNIV TENNESSEE-KNOXV	F C OWENS	HQ	S M JENG	NGT 00-050-646	7448
41	UNIV TENNESSEE-KNOXV	F SIX	MSFC	T D MCCAY	NGT 00-050-876	7450
41	VANDERBILT UNIVERSTY	F MONTEGANI	LERC	R J SCHULZ	NGT 00-051-048	7452
41	VANDERBILT UNIVERSTY	C C CHAMIS	LERC	T A CRUSE	NAG 3-1352	7458
41	VANDERBILT UNIVERSTY	C C CHAMIS	LERC	S MAHADEVAN	NAG 3-1372	7459
41	VANDERBILT UNIVERSTY	G S SEIDEL	HQ	T A CRUSE	NGT 00-010-024	7479
41	PRAIRIE VIEW A&M U	E T MELEASON	LERC	I CHANG	NAG 3-1500	7510
41	RICE UNIVERSITY	D O ALLISON	LARC	A J MEADE JR.	NAG 1-1196	7520
41	RICE UNIVERSITY	M B TRACY	LARC	A J MEADE	NAG 1-1433	7521
41	RICE UNIVERSITY	P E HUNTER	HQ	J E DENNIS	NCCW 27	7561
41	TEXAS A&M UNIVERSITY	W WHITLOW	LARC	L A CARLSON	NAG 1-793	7588
41	TEXAS A&M UNIVERSITY	L C HARTUNG	LARC	L A CARLSON	NAG 1-1003	7589
41	TEXAS A&M UNIVERSITY	S K ROBINSON	LARC	A AHMED	NAG 1-1273	7591
41	TEXAS A&M UNIVERSITY	M F CARD	LARC	O W MICKS	NAG 1-1522	7595
41	TEXAS A&M UNIVERSITY	R L CAMPBELL	LARC	T A GALLY	NAG 1-1596	7596
41	TEXAS A&M UNIVERSITY	D E PAXSON	LERC	T SCHOBELIRI	NAG 3-1144	7601
41	TEXAS A&M UNIVERSITY	C C CHAMIS	LERC	J D WHITCOMB	NAG 3-1270	7604
41	TEXAS A&M UNIVERSITY	P E POINSATTE	LERC	J C HAN	NAG 3-1656	7611
41	TEXAS A&M UNIVERSITY	C D SCOTT	JSC	L A CARLSON	NAG 9-680	7638

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	TEXAS A&M UNIVERSITY	J CANNON	MSFC	W CHILDS	NAS 8-37821	7657
41	TEXAS A&M UNIVERSITY	R E MEYERSON	JSC	O NICKS	NAS 9-18882	7658
41	TEXAS A&M UNIVERSITY	J H DEL FRATE	ARC	D T WARD	NCC 2-742	7661
41	TEXAS TECH UNIV	G MEYER	ARC	C F MARTIN	NAG 2-902	7707
41	UNIV HOUSTON	J BURKE	JSC	B H JANSEN	NAG 9-544	7723
41	UNIV TEXAS-AUSTIN	G L MCANINCH	LARC	D T BLACKSTOCK	NAG 1-1204	7815
41	UNIV TEXAS-AUSTIN	W E ZORUMSKI	LARC	D S DOLLING	NAG 1-1471	7818
41	UNIV TEXAS-AUSTIN	G L MCANINCH	LARC	D T BLACKSTOCK	NAG 1-1615	7819
41	UNIV TEXAS-AUSTIN	W R HINGST	LERC	D S DOLLING	NAG 3-1023	7827
41	UNIV TEXAS-AUSTIN	D A HAMILTON	JSC	R R CRAIG	NAG 9-484	7850
41	UNIV TEXAS-AUSTIN	J W SUNKEL	JSC	R H BISHOP	NAG 9-526	7851
41	UNIV TEXAS-AUSTIN	D A HAMILTON	JSC	R R CRAIG	NAG 9-670	7856
41	UNIV TEXAS-AUSTIN	E L CHRISTIANSEN	JSC	E P FAHRENTHOLD	NAG 9-675	7858
41	UNIV TEXAS-AUSTIN	R CARPENTER	JSC	B E SCHUTZ	NAG 9-750	7862
41	UNIV TEXAS-AUSTIN	R STACHNIK	HQ	P J SHELUS	NAGW 2970	7881
41	UNIV TEXAS-AUSTIN	J LEDIT	JSC	B E SCHULTZ	NCC 9-35	7906
41	UNIV TEXAS-AUSTIN	F C OWENS	HQ	W T FOWLER	NGT 00-050-573	7913
41	UNIV TEXAS-AUSTIN	F C OWENS	HQ	P VARGHESE	NGT 00-070-032	7929
41	UNIV TEXAS-AUSTIN	H ASHKENAS	JPL	B D TAPLEY	NGT 00-070-262	7933
41	UNIV TEXAS-AUSTIN	E J PRIOR	LARC	D S DOLLING	NGT 00-070-270	7934
41	UNIV TEXAS-DALLAS	G MEYER	ARC	L R HUNT	NCC 2-8002	7953
41	UNIV TEX-BROWNSVILLE	G E MCSIER	GSFC	Z L XU	NAG 5-2210	7975
41	UNIV TEXAS-S ANTONIO	C C CHAMIS	LERC	L BOYCE	NAG 3-867	7977
41	BRIGHAM YOUNG UNIV	G S SEIDEL	HQ	C D SORENSEN	NGT 00-010-013	7990
41	UNIV OF UTAH	Z T APPLIN	LARC	R A DECKER	NAG 1-1232	7992
41	UTAH STATE UNIV	R M HABERLE	ARC	J CANTRELL	NAG 2-874	8014
41	COLLEGE OF WM & MARY	E PRIOR	LARC	R A ORWOLL	NGT 00-070-293	8086
41	HAMPTON UNIVERSITY	E C YATES	LARC	H HU	NAG 1-1170	8112
41	OLD DOMINION UNIV	S E MASSENBERG	LARC	S N TIWARI	NAG 1-363	8131
41	OLD DOMINION UNIV	A KUMAR	LARC	S N TIWARI	NAG 1-423	8132
41	OLD DOMINION UNIV	J B MALONE	LARC	O A KANDIL	NAG 1-648	8134
41	OLD DOMINION UNIV	D S MILLER	LARC	O BAYSAL	NAG 1-1188	8145
41	OLD DOMINION UNIV	H E JONES	LARC	A C TAYLOR	NAG 1-1265	8147
41	OLD DOMINION UNIV	S A RIZZI	LARC	C MEI	NAG 1-1358	8149
41	OLD DOMINION UNIV	D S MILLER	LARC	O BAYAAL	NAG 1-1499	8154
41	OLD DOMINION UNIV	J M SEINER	LARC	S H TIWARI	NAG 1-1518	8156
41	OLD DOMINION UNIV	G S JONES	LARC	R L ASH	NAG 1-1552	8159
41	OLD DOMINION UNIV	M C FISCHER	LARC	S N TIWARI	NAG 1-1556	8160
41	OLD DOMINION UNIV	C J CANARDA	LARC	G HOU	NAG 1-1567	8161
41	OLD DOMINION UNIV	J L DILLON	LARC	O BAYSAL	NAG 1-1576	8162
41	OLD DOMINION UNIV	J H STARNES	LARC	N F KNIGHT	NAG 1-1588	8164
41	OLD DOMINION UNIV	E D PRIOR	LARC	B E WOLFSON	NAS 1-18584	8172
41	OLD DOMINION UNIV	E J PRIOR	LARC		NAS 1-19858	8173
41	OLD DOMINION UNIV	R E SMITH JR.	LARC	S N TIWARI	NCC 1-68	8175
41	OLD DOMINION UNIV	S P WILKINSON	LARC	G V SELBY	NCC 1-180	8180
41	OLD DOMINION UNIV	L EVANS	LARC	R L ASH	NGT 00-051-259	8193
41	UNIV OF VIRGINIA	G B NORTHAN	LARC	J C MCDANIEL	NAG 1-795	8210
41	UNIV OF VIRGINIA	J H STARNES JR.	LARC	C T HERAKOVICH	NAG 1-841	8211
41	UNIV OF VIRGINIA	J H STARNES	LARC	A K NOOR	NAG 1-1162	8215
41	UNIV OF VIRGINIA	R C ROGERS	LARC	J C MCDANIEL	NAG 1-1633	8220
41	UNIV OF VIRGINIA	S M ARNOLD	LERC	M PINDER	NAG 3-1377	8226
41	UNIV OF VIRGINIA	S R THOMAS	LERC	R H KRAUSS	NAG 3-1518	8228
41	UNIV OF VIRGINIA	E PRIOR	LARC	J C MCDANIEL	NGT 00-050-897	8282
41	VIRGINIA POLY INST	J H STARNES JR.	LARC	R T HAFTKA	NAG 1-168	8310
41	VIRGINIA POLY INST	H M ADELMAN	LARC	R T HAFTKA	NAG 1-224	8311
41	VIRGINIA POLY INST	R J SILCOX	LARC	C R FULLER	NAG 1-390	8314
41	VIRGINIA POLY INST	J H STARNES JR	LARC	E R JOHNSON	NAG 1-537	8315
41	VIRGINIA POLY INST	J H STARNES	LARC	Z GURDAL	NAG 1-643	8316
41	VIRGINIA POLY INST	D H RUDY	LARC	R W WALTERS	NAG 1-776	8317
41	VIRGINIA POLY INST	M P NEMETH	LARC	M W HYER	NAG 1-901	8319

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
41	VIRGINIA POLY INST	B B GLOSS	LARC	W H MASON	NAG 1-1098	8320
41	VIRGINIA POLY INST	T F BROOKS	LARC	W J DEVENPORT	NAG 1-1119	8322
41	VIRGINIA POLY INST	P G COEN	LARC	B GROSSMAN	NAG 1-1160	8323
41	VIRGINIA POLY INST	J H STARNES	LARC	Z GURDAL	NAG 1-1215	8325
41	VIRGINIA POLY INST	G B NORTHAM	LARC	J A SCHETZ	NAG 1-1277	8328
41	VIRGINIA POLY INST	J H STARNES	LARC	L LIBRESCU	NAG 1-1300	8331
41	VIRGINIA POLY INST	S K ROBINSON	LARC	R L SIMPSON	NAG 1-1303	8332
41	VIRGINIA POLY INST	G L FARLEY	LARC	J MORTON	NAG 1-1392	8335
41	VIRGINIA POLY INST	G L FARLEY	LARC	J MORTON	NAG 1-1393	8336
41	VIRGINIA POLY INST	K H GOODRICH	LARC	E M CLIFF	NAG 1-1405	8337
41	VIRGINIA POLY INST	J SOBIESKI	LARC	R K KAPANIA	NAG 1-1411	8338
41	VIRGINIA POLY INST	J V FOSTER	LARC	W C DURHAM	NAG 1-1449	8340
41	VIRGINIA POLY INST	M D SALAS	LARC	B GROSSMAN	NAG 1-1466	8344
41	VIRGINIA POLY INST	G B NORTHAM	LARC	T DILLER	NAG 1-1538	8348
41	VIRGINIA POLY INST	T F BROOKS	LARC	W J DEVENPORT	NAG 1-1539	8349
41	VIRGINIA POLY INST	P A NEWMAN	LARC	B GROSSMAN	NAG 1-1562	8350
41	VIRGINIA POLY INST	M R WASZAK	LARC	M R ANDERSON	NAG 1-1573	8351
41	VIRGINIA POLY INST	P A GELHAUSEN	ARC	W H MASON	NAG 2-919	8357
41	VIRGINIA POLY INST	D L TWEEDT	LERC	W F NG	NAG 3-830	8358
41	VIRGINIA POLY INST	K L SUDER	LERC	W F NG	NAG 3-1211	8359
41	VIRGINIA POLY INST	A K OWEN	LERC	W F OBRIEN	NAG 3-1521	8363
41	VIRGINIA POLY INST	R P WOODWARD	LERC	W NG	NAG 3-1539	8364
41	VIRGINIA POLY INST	A R OWEN	LERC	W F OBRIEN	NAG 3-1667	8367
41	VIRGINIA POLY INST	G P GURUSWAMY	ARC	R K KAPANIA	NCA 2-625	8373
41	VIRGINIA POLY INST	G S DEIWERT	ARC	J A SCHETZ	NCA 2-800	8374
41	VIRGINIA POLY INST	G P GURUSWAMY	ARC	R K KAPANIA	NCA 2-838	8375
41	VIRGINIA POLY INST	J V FOSTER	LARC	F H LUTZE	NCC 1-158	8376
41	VIRGINIA POLY INST	L D BIRCKELBAW	ARC	J R MAHAN	NCC 2-691	8377
41	VIRGINIA POLY INST	G P GURUSWAMY	ARC	R K KAPANIA	NCC 2-5036	8378
41	VIRGINIA POLY INST	G S DEIWERT	ARC	J A SCHETZ	NCC 2-5040	8379
41	VIRGINIA POLY INST	G P GURUSWAMY	ARC	R K KAPANIA	NCC 2-5097	8380
41	VIRGINIA POLY INST	G S SEIDEL	HQ	B GROSSMAN	NGT 00-010-025	8381
41	VIRGINIA POLY INST	E PRIOR	LARC	D P TELIONIS	NGT 00-050-978	8384
41	VIRGINIA POLY INST	E PRIOR	LARC	R T HAFTKA	NGT 00-051-174	8389
41	UNIV OF WASHINGTON	C M BELCASTRO	LARC	U L LY	NAG 1-1210	8422
41	UNIV OF WASHINGTON	J F BARTHELEMY	LARC	E LIVINE	NAG 1-1628	8426
41	UNIV OF WASHINGTON	J GERA	ARC	U LY	NAG 2-629	8427
41	UNIV OF WASHINGTON	M TAKAHASHI	ARC	U LY	NAG 2-691	8429
41	UNIV OF WASHINGTON	W R HINGST	LERC	F B GESSNER	NAG 3-376	8434
41	UNIV OF WASHINGTON	G J SKOCH	LERC	J J KELLER	NAG 3-1486	8435
41	UNIV OF WASHINGTON	G SKOCH	LERC	J J KELLER	NAG 3-1595	8436
41	UNIV OF WASHINGTON	V MUKHOPADHYAY	LARC	M C BERG	NCC 1-156	8522
41	UNIV OF WASHINGTON	W VAN DALSEM	ARC	S EBERHARDT	NCC 2-5099	8524
41	WASHINGTON ST UNIV	R A KENNELLY	ARC	R V WESTPHAL	NCC 2-5052	8575
41	WEST VIRGINIA UNIV	D E REUBUSH	LARC	J L LOTH	NAG 1-1584	8584
41	WEST VIRGINIA UNIV	A H BOWERS	ARC	M R NAPOLITANO	NCC 2-759	8590
41	UNIV OF QUEENSLAND	G Y ANDERSON	LARC	R J STALKER	NAGW 674	8818
41	UNIV OF WATERLOO	M S LIOU	LERC	W H HUI	NAGW 3112	8821
41	IMPERIAL C SCI & TEC	K GUPTA	ARC	H FORD	NAGW 3909	8824
41	SURREY UNIVERSITY	K K GUPTA	ARC	H NOOSHIN	NAGW 4132	8825
41	UNIVERSITY OF LEEDS	R E SMITH	LARC	M I BLOOR	NAGW 3198	8826
41	UNIV OF MANCHESTER	F S COLLIER JR.	LARC	D I POLL	NAGW 3871	8827
41	UNIV OF WALES	K K GUPTA	ARC	O C ZIENKIEWICZ	NAGW 2127	8828
41	UNIV OF WALES	K K GUPTA	ARC	K MORGAN	NAGW 2962	8829
41	UNIV OF WALES	K S BEY	LARC	K MORGAN	NAGW 3290	8830
41	ISRAEL INST OF TECH	M W KEHOE	ARC	E NISSIM	NAGW 3201	8833
41	DELFT UNIV OF TECH	J H STARNES	LARC	J ARBOCZ	NAGW 2736	8836
41	UNIV OF KARLSRUHE	H WRIGHT	HQ	V KUNDE	NASW 4685	8840
42	AUBURN UNIV-AUBURN	W A ORAN	HQ	R ASKEW	NAGW 1192	1030
42	UNIV ALA-HUNTSVILLE	F SIX	MSFC	G KARR	NAG 8-293	1102

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
42	UNIV ALA-HUNTSVILLE	J JOHNSON	MSFC	J C GREGORY	NAS 8-38428	1153
42	UNIV ALA-TUSCALOOSA	R M NIXON	MSFC	J A MARTIN	NAG 8-901	1202
42	ARIZONA STATE UNIV	L KEFFER	HQ	H REED	NGT 00-010-027	1333
42	ARIZONA STATE UNIV	F C OWENS	HQ	H L REED	NGT 00-050-745	1334
42	UNIV OF ARIZONA	D J FLOOD	LERC	P A FRANKEN	NAG 3-1499	1370
42	CALIF INST OF TECH	D K RUSSELL	HQ	H G HOMUNG	NGT 00-070-372	1716
42	SAN FRAN STATE UNIV	G MULENBURG	ARC	P PFAELZER	NCA 2-801	1794
42	STANFORD UNIVERSITY	J GERVIN	GSFC	J TIMOTHY	NAS 5-30387	1944
42	STANFORD UNIVERSITY	G BRIGGS	ARC	B LUSIGNAN	NCA 2-802	1966
42	STANFORD UNIVERSITY	B P HINE	ARC	R H CANNON	NCC 2-333	1976
42	STANFORD UNIVERSITY	G BRIGGS	ARC	B LUSIGNAN	NCC 2-5030	1991
42	STANFORD UNIVERSITY	L LEMKE	ARC	I KROO	NCC 2-5058	1994
42	STANFORD UNIVERSITY	R ARNO	ARC	G SPRINGER	NCC 2-5080	2001
42	UNIV CALIF-BERKELEY	R DELOACH	LARC	F C HURLBUT	NAG 1-1452	2051
42	UNIV CALIF-L ANGELES	D D MOERDER	LARC	J L SPEYER	NAG 1-1256	2344
42	COLORADO STATE UNIV	J C KOLECKI	LERC	P J WILBUR	NAG 3-776	2770
42	UNIV COLORADO-BOLDR	G HUNOLT	GSFC	R G BARRY	NAS 5-32392	3033
42	UNIV COLORADO-BOLDR	A B DOUGHERTY	HQ	L D PETERSON	NASW 4873	3037
42	UNIV COLORADO-BOLDR	F C OWENS	HQ	M M MIKULAS	NGT 00-050-709	3074
42	UNIV COLORADO-BOLDR	F C OWENS	HQ	G BORN	NGT 00-050-759	3076
42	UNIV COLORADO-BOLDR	F C OWENS	HQ	G ROSBOROUGH	NGT 00-050-761	3077
42	UNIV COLORADO-BOLDR	J DURNING	GSFC	C BARTH	NGT 00-050-934	3087
42	GEORGE WASHINGTON U	L F ROWELL	LARC	R H TOLSON	NCC 1-104	3228
42	GEORGE WASHINGTON U	T E HUBER	GSFC	G FRIEDER	NCC 5-51	3229
42	FLORIDA INST OF TECH	D HOLLAND	HQ	T D OSWALT	NGT 00-051-086	3325
42	GEORGIA INST OF TECH	D D MOERDER	LARC	A J CALISE	NAG 1-1257	3519
42	GEORGIA INST OF TECH	J JUANG	LARC	C H CHUANG	NAG 1-1397	3521
42	GEORGIA INST OF TECH	D D MOERDER	LARC	D H HODGES	NAG 1-1435	3523
42	GEORGIA INST OF TECH	J M HANSON	MSFC	C H CHUENG	NAG 8-921	3556
42	GEORGIA INST OF TECH	F MONTEGANI	LERC	M P KAMAT	NGT 00-050-981	3591
42	UNIV ILLINOIS-URBANA	J M SANKOVIC	LERC	R L BURTON	NAG 3-1360	3953
42	PURDUE UNIVERSITY	P A COOPER	LARC	R E SKELTON	NAG 1-1306	4044
42	UNIV OF EVANSVILLE	R R TACINA	LERC	B RILEY	NAG 3-746	4119
42	UNIV OF NOTRE DAME	R M STUBBS	LERC	J M POWERS	NAG 3-1335	4123
42	UNIV OF NOTRE DAME	R M STUBBS	LERC	J M POWERS	NCC 3-325	4138
42	IOWA STATE UNIV	D D MOERDER	LARC	D LU	NAG 1-1255	4145
42	IOWA STATE UNIV	W T SUIT	LARC	B L PIERSON	NAG 1-1304	4146
42	WICHITA STATE UNIV	E PRIOR	LARC	M PAPADAKIS	NGT 00-050-984	4284
42	UNIV OF KENTUCKY	T A KASHANGAKI	LARC	S W SMITH	NAG 1-1246	4288
42	UNIV OF KENTUCKY	G BRIGGS	ARC	J SCHAEFER	NCC 2-5087	4296
42	UNIV OF LOUISVILLE	L W TAYLOR	LARC	J H LILLY	NAG 1-1446	4298
42	TULANE UNIVERSITY	R C MONTGOMERY	LARC	E BARBIERI	NAG 1-1270	4358
42	UNIV MARYLAND-COL PK	J E NEALY	LARC	M J LEWIS	NAG 1-1285	4524
42	UNIV MARYLAND-COL PK	L HOLCOMB	HQ	D AKIN	NAGW 2245	4634
42	UNIV MARYLAND-COL PK	D B LAVERY	HQ	D L AKIN	NAGW 4034	4671
42	UNIV MARYLAND-COL PK	S H MORGAN JR.	MSFC	H J PAIK	NAS 8-38137	4682
42	BRANDEIS UNIVERSITY	D HOLLAND	HQ	D H ROBERTS	NGT 00-051-078	4772
42	MASS INST OF TECH	L G CLARK	LARC	E CROWLEY	NAS 1-18690	5035
42	MASS INST OF TECH	R S TAYLOR	LARC	A H VON FLOTOW	NAS 1-19381	5036
42	MASS INST OF TECH	K OGALVIE	GSFC	J LAZARUS	NAS 5-30550	5039
42	MASS INST OF TECH	M MOORE	ARC	G WALL	NGT 00-050-940	5078
42	UNIV MICH-ANN ARBOR	S M JOSHI	LARC	N H MCCLAMROCH	NAG 1-1419	5203
42	UNIV MICH-ANN ARBOR	F SCHMIDT	GSFC	G R CARIGNAN	NAS 5-38096	5309
42	UNIV MICH-ANN ARBOR	J H KERR	MSFC	P M BANKS	NAS 8-39381	5312
42	UNIV MICH-ANN ARBOR	H M YEE	ARC	P L ROE	NCA 2-521	5313
42	UNIV MICH-ANN ARBOR	F C OWENS	HQ	P L ROE	NGT 00-050-713	5331
42	UNIV MICH-ANN ARBOR	E J PRIOR	LARC	A M WAAS	NGT 00-050-977	5335
42	U MINN-MNPLS-ST PAUL	E S ARMSTRONG	LARC	G J BALAS	NAG 1-1254	5367
42	U MINN-MNPLS-ST PAUL	D WEST	GSFC	R HUMPHREYS	NAS 5-32670	5410
42	U MINN-MNPLS-ST PAUL	M L KAISER	GSFC	P KELLOG	NAS 5-33048	5411

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
42	MISSISSIPPI STATE U	F C OWENS	HQ	K KOENIG	NGT 00-050-694	5458
42	UNIV MO-COLUMBIA	J M HICKMAN	LERC	C A KLUEVER	NAG 3-1581	5486
42	UNIV MO-COLUMBIA	J M HICKMAN	LERC	C A KLUEVER	NAG 3-1650	5487
42	PRINCETON UNIVERSITY	W T SUIT	LARC	R F STENGEL	NAG 1-1501	5719
42	NEW MEX ST U-LAS CR	M E NEIN	MSFC	J O BURNS	NAG -939	5840
42	UNIV OF NEW MEXICO	M E NEIN	MSFC	K M CHUA	NAG 8 333	5879
42	UNIV OF NEW MEXICO	M E NEIN	MSFC	J T MCGRAW	NAG 8-940	5880
42	COLUMBIA UNIVERSITY	J N JUANG	LARC	R W LONGMAN	NAG 1-649	5933
42	CORNELL UNIVERSITY	F C OWENS	HQ	S B POPE	NGT 00-050-842	6102
42	CORNELL UNIVERSITY	F C OWENS	HQ	M C KELLEY	NGT 00-070-219	6117
42	STATE UNIV NY-BUFFAL	T H STENGLE	GSFC	D J MOOK	NAG 5-2181	6236
42	NO CAR A&T STATE U	R C MONTGOMERY	LARC	E G ABU-SABA	NAG 1-997	6360
42	NO CAROLINA STATE U	J JUANG	LARC	G K LEE	NAG 1-1283	6381
42	NO CAROLINA STATE U	L W TAYLOR	LARC	L SHARPE	NAG 1-1436	6383
42	NO CAROLINA STATE U	W T DAVIS	LARC	G D WALBERG	NCC 1-168	6412
42	NO CAROLINA STATE U	H W STONE	LARC	G D WALBERG	NCC 1-185	6416
42	UNIV N CAR-CHARLOTTE	E S ARMSTRONG	LARC	Y P KAKAD	NAG 1-1414	6449
42	CENTRAL ST UNIV-OHIO	D E LACY	LERC	C B OKHIO	NAG 3-1517	6574
42	CLEVELAND STATE UNIV	J P GYKENYESI	LERC	J H HEMANN	NAG 3-1216	6585
42	CLEVELAND STATE UNIV	T MROZ	LERC	P V HERMANN	NCC 3-143	6607
42	OHIO STATE UNIV	F M CURRAN	LERC	P J TURCHI	NAG 3-1465	6678
42	UNIV OF AKRON	L BERKE	LERC	T Y CHANG	NAG 3-1350	6752
42	UNIV OF CINCINNATI	P G MAGHAMI	LARC	T WILLIAMS	NAG 1-1418	6783
42	UNIV OF CINCINNATI	C HESS	JSC	T WILLIAMS	NAG 9-766	6801
42	UNIV OF CINCINNATI	F MONTEGANI	LERC	S G RUBIN	NGT 00-070-278	6826
42	UNIV OF TOLEDO	J K LYTLE	LERC	K J DEWITT	NAG 3-1165	6841
42	UNIV OF TOLEDO	S M ARNOLD	LERC	T G KEITH	NCC 3-120	6867
42	UNIV OF TOLEDO	R M STUBBS	LERC	K J DEWITT	NCC 3-171	6869
42	UNIV OF TOLEDO	R M STUBBS	LERC	K J DEWITT	NCC 3-229	6872
42	OKLAHOMA STATE UNIV	F C OWENS	HQ	K PERRY	NGT 00-050-766	6891
42	OKLAHOMA STATE UNIV	F C OWENS	HQ	L BARNES	NGT 00-050-767	6892
42	LEHIGH UNIVERSITY	J JUANG	LARC	M CHEW	NAG 1-1477	7030
42	PENN STATE U-UNIV PK	K B LIM	LARC	A RAY	NAG 1-1417	7054
42	PENN STATE U-UNIV PK	K J BREISACHER	LERC	G S DULIKRAVICH	NAG 3-1341	7078
42	PENN STATE U-UNIV PK	C M GRODSINSKY	LERC	A SINHA	NAG 3-1586	7083
42	PENN STATE U-UNIV PK	R DONNELLY	GSFC	F CORDORA	NAS 5-31787	7157
42	TENNESSEE STATE UNIV	H P FRISCH	GSFC	L KEEL	NAG 5-2109	7413
42	TEXAS TECH UNIV	F M CURRAN	LERC	E A O'HAIR	NAG 3-1172	7708
42	UNIV HOUSTON	K KRISHEN	JSC	F CHANG-DIAZ	NAG 9-759	7741
42	UNIV TEXAS-AUSTIN	J TELES	GSFC	B D TAPLEY	NAG 5-1970	7838
42	UNIV TEXAS-AUSTIN	J REUTER	JSC	D TESAR	NAG 9-411	7848
42	UNIV TEXAS-AUSTIN	G SOFFEN	GSFC	B D TAPIEY	NGT 00-050-760	7918
42	UNIV TEXAS-EL PASO	G L PACK	JSC	S A SPARKS	NAG 9-756	7963
42	UNIV TEXAS-EL PASO	J CARVAJAL	JSC	V KREINEVICH	NAG 9-757	7964
42	UNIV TEXAS-S ANTONIO	B L WHITE	HQ	L BOYCE	NAGW 4114	7980
42	VIRGINIA POLY INST	J P WILLIAMS	LARC	L MEIROVITCH	NAG 1-225	8312
42	VIRGINIA POLY INST	D D MOERDER	LARC	E M CLIFF	NAG 1-1244	8326
42	VIRGINIA POLY INST	S S WELCH	LARC	G INDEBETOUW	NAG 1-1363	8334
42	YORK UNIVERSITY	J K KALINOWSKI	GSFC	J J CALDWELL	NAS 5-30294	8822
42	UNIV STUTTGART	F M CURRAN	LERC	H O SCHRADER	NAGW 1736	8839
43	AUBURN UNIV-AUBURN	D L BRITTON	LERC	B J TATARCHUK	NAG 3-1154	1020
43	UNIV OF ARIZONA	D K RUSSELL	HQ	W RASMUSSEN	NGT 00-070-256	1567
43	CALIF INST OF TECH	F KOHL	LERC	G T SMEDLEY	NAS 3-27263	1688
43	STANFORD UNIVERSITY	G A ZIMMERLI	LERC	A P GAST	NAG 3-1652	1901
43	STANFORD UNIVERSITY	M L PUSEY	MSFC	R S FEIGELSON	NAG 8-920	1910
43	STANFORD UNIVERSITY	G A LESANE	HQ	G M HOMSY	NGT 00-051-344	2030
43	UNIV CALIF-DAVIS	D CAGLIOSTRO	ARC	B J MCCOY	NCC 2-5079	2291
43	UNIV CALIF-SAN DIEGO	D R SCHRYER	LARC	R K HERZ	NAG 1-1051	2494
43	UNIV CALIF-S BARBARA	G A LESANE	HQ	L G LEAL	NGT 00-051-342	2671
43	COLORADO SCH OF MINE	R FRIEDMAN	LERC	J T MCKINNON	NAG 3-1628	2762

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
43	UNIV COLORADO-BOLDR	R DEWITT	LERC	K TIMMERHAUS	NAG 3-1018	2832
43	UNIV COLORADO-BOLDR	J A SALZMAN	LERC	R H DAVIS	NAG 3-1389	2838
43	UNIV COLORADO-BOLDR	T Y MILLER	MSFC	R H DAVIS	NAG 8-945	2924
43	UNIV COLORADO-BOLDR	G CRESS	JSC	R CULP	NAG 9-768	2931
43	UNIV OF CONNECTICUT	F C OWENS	HQ	C S SUNG	NGT 00-070-214	3147
43	UNIV OF DELAWARE	G A LESANE	HQ	E W KALER	NGT 00-051-347	3205
43	FLORIDA INST OF TECH	W E LARSON	KSC	R G BARILE	NAG10-98	3320
43	UNIV OF CENTRAL FLA	A L BAIN	KSC	D L BLOCK	NAG10-123	3382
43	UNIV OF FLORIDA	B S SINGH	LERC	C W PARK	NAG 3-1635	3409
43	UNIV OF FLORIDA	P N PETERS	MSFC	T J ANDERSON	NCC 8-51	3444
43	UNIV OF FLORIDA	F MONTEGANI	LERC	R NARAYANAN	NGT 00-051-242	3451
43	UNIV OF SO FLORIDA	H L NGUYEN	LERC	S J BEN YING	NAG 3-1112	3482
43	NORTHWESTERN UNIV	S A GOKOGLU	LERC	B J MATKOWSKY	NAG 3-1608	3786
43	UNIV ILLINOIS-URBANA	M PUSEY	MSFC	E B VAN SWOL	NAG 8-976	3973
43	UNIV ILLINOIS-URBANA	B CARPENTER	HQ	F B VAN SWOL	NGT 00-051-064	4001
43	IOWA STATE UNIV	C K FINN	ARC	D K ROLLINS	NAG 2-909	4151
43	TULANE UNIVERSITY	S GONDA	JSC	K O'CONNOR	NAG 9-733	4362
43	JOHNS HOPKINS UNIV	G LASANE	HQ	W M SALTZMAN	NGT 00-051-134	4499
43	MASS INST OF TECH	B FACEMIRE	MSFC	T A HATTON	NAG 8-951	4958
43	MASS INST OF TECH	S L LEHOCZKY	MSFC	R A BROWN	NAG 8-961	4959
43	MASS INST OF TECH	F R SZOFRAN	MSFC	R A BROWN	NAG 8-962	4960
43	UNIV OF MASS-AMHERST	W M KNOTT	KSC	K A COREY	NAG10-91	5124
43	MICHIGAN TECH UNIV	J E FINN	ARC	D W HAND	NAG 2-820	5178
43	MISSISSIPPI STATE U	C G UPTON	MSFC	W B HALL	NAG 8-936	5449
43	UNIV SO MISSISSIPPI	G LESANE	HQ	L J MATHIAS	NGT 00-051-261	5474
43	UNIV NEW HAMP-DURHAM	J M HOELL	LARC	R W TALBOT	NAG 1-1233	5647
43	UNIV NEW HAMP-DURHAM	G LESANE	HQ	P GRILL	NGT 00-051-144	5715
43	PRINCETON UNIVERSITY	R C DARTY	MSFC	D A SAVILLE	NAG 8-969	5752
43	PRINCETON UNIVERSITY	B CARPENTER	HQ	D A SAVILLE	NGT 00-051-073	5779
43	PRINCETON UNIVERSITY	G A LESANE	HQ	D A SAVILLE	NGT 00-051-343	5782
43	RUTGERS ST U-N BRNSK	D A HOLLAND	HQ	J M WIENCEK	NGT 00-051-150	5801
43	RUTGERS ST U-PISCTWY	G A LESANE	HQ	J M WIENCEK	NGT 00-051-352	5812
43	RUTGERS ST U-PISCTWY	G A LESANE	HQ	J M WIENCEK	NGT 00-051-353	5813
43	CLARKSON UNIVERSITY	R L THOMPSON	LERC	R S SUBRAMANIAN	NAG 3-1470	5917
43	SYRACUSE UNIVERSITY	H K NAHRA	LERC	A S SANGANI	NAG 3-1630	6302
43	NO CAROLINA STATE U	E L FORCE	ARC	D F OLLIS	NAG 2-684	6385
43	CASE WESTERN RESERVE	M A REID	LERC	B D CAHAN	NAG 3-1111	6480
43	CASE WESTERN RESERVE	J K SUTTER	LERC	E BAER	NCC 3-322	6550
43	CLEVELAND STATE UNIV	S K RUTLEDGE	LERC	P D HAMBOURGER	NCC 3-19	6596
43	CLEVELAND STATE UNIV	P R PROKOPIUS	LERC	G COULMAN	NCC 3-23	6597
43	CLEVELAND STATE UNIV	F I HURWITZ	LERC	A H ANDRIST	NCC 3-63	6599
43	CLEVELAND STATE UNIV	K W STREET	LERC	D B SHAH	NCC 3-301	6621
43	CLEVELAND STATE UNIV	P R PROKOPIUS	LERC	G COULMAN	NCC 3-342	6632
43	PENN STATE U-UNIV PK	M STUCKER	MSFC	N J SALAMON	NAG 8-879	7123
43	PENN STATE U-UNIV PK	D KWAK	ARC	J M TARBELL	NCA 2-544	7168
43	PENN STATE U-UNIV PK	D K RUSSELL	HQ	J FRANGOS	NGT 00-070-328	7201
43	RICE UNIVERSITY	F C OWENS	HQ	L V MCINTIRE	NGT 00-050-557	7566
43	TEXAS A&M UNIVERSITY	P R PROKOPIUS	LERC	S SRINIVASAN	NAG 3-1255	7603
43	TEXAS A&M UNIVERSITY	P L EVANICH	HQ	J O BROCKIS	NAGW 1779	7644
43	UNIV HOUSTON	J B MCQUILLEN	LERC	A E DUKLER	NAG 3-510	7714
43	UNIV HOUSTON	K MILLER	JSC	R METCALF	NAG 9-674	7735
43	UNIV HOUSTON	F MONTEGANI	LERC	A E DUKLER	NGT 00-051-159	7752
43	HAMPTON UNIVERSITY	G B NORTHAM	LARC	J F AKYURTU	NAG 1-1636	8114
43	OLD DOMINION UNIV	R M BAUCOM	LARC	J M MARCHELLO	NAG 1-1067	8141
43	UNIV OF VIRGINIA	J E FINN	ARC	M D LE VAN	NCC 2-5024	8266
43	UNIV OF VIRGINIA	M BURRELL	GSFC	L U LILLELEHET	NGT 00-051-094	8291
43	UNIV OF VIRGINIA	F C OWENS	HQ	J L HUDSON	NGT 00-070-173	8300
43	VIRGINIA POLY INST	E PRIOR	LARC	G L WILKES	NGT 00-051-117	8388
43	UNIV OF WASHINGTON	J K ALEXANDER	HQ	E J DAVIS	NGT 00-051-001	8555
44	UNIV OF SOUTHERN CAL	F B BURCHAM	ARC	E A JONCKHEERE	NCC 2-4002	2750

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
44	COLORADO STATE UNIV	J K ALEXANDER	HQ	W Z SADEH	NGT 00-050-929	2803
44	COLORADO STATE UNIV	D K RUSSELL	HQ	W Z SADEH	NGT 00-070-373	2805
44	UNIV OF CENTRAL FLA	T I YANG	KSC	W F CARROLL	NAG10-128	3384
44	LA ST U&A&M COL-BRGE	A JOYCE	SSC	D ROY	NGT 00-051-215	4340
44	MASS INST OF TECH	G SOFFEN	GSFC	D ENTEKHABI	NGT 00-050-925	5077
44	MASS INST OF TECH	G LESANE	HQ	D ENTEKHABI	NGT 00-051-158	5081
44	NEW MEX ST U-LAS CR	F C OWENS	HQ	R B JACQUEZ	NGT 00-070-114	5862
44	NO CAROLINA STATE U	F C OWENS	HQ	W J RASDORF	NGT 00-050-591	6421
44	CLEVELAND STATE UNIV	J R ELLIS	LERC	J H HEMANN	NAG 3-1543	6592
44	CARNEGIE-MELLON UNIV	D B LAVERY	HQ	W L WHITTAKER	NAGW 3903	6989
44	VANDERBILT UNIVERSITY	E SCHWARTZ	HQ	T A CRUSE	NGT 00-050-702	7481
44	PRAIRIE VIEW A&M U	K E HENDERSON	JSC	R RADHA	NAG 9-667	7517
44	TEXAS A&M UNIVERSITY	F C OWENS	HQ	P N ROSCHKE	NGT 00-070-221	7678
44	UNIV HOUSTON	K HENDERSON	JSC	L BELL	NAG 9-662	7733
44	OLD DOMINION UNIV	O O STORAASLI	LARC	D T NGUYEN	NAG 1-858	8136
44	UNIV OF VIRGINIA	H D CARDEN	LARC	A K NOOR	NAG 1-1197	8217
44	UNIV OF VIRGINIA	F C OWENS	HQ	W D PILKEY	NGT 00-070-230	8302
45	AUBURN UNIV-AUBURN	D K HALL	MSFC	S A MERRYMAN	NAG 8-1058	1029
45	AUBURN UNIV-AUBURN	E D BAUMANN	LERC	R W JOHNSON	NCC 3-175	1034
45	AUBURN UNIV-AUBURN	F C OWENS	HQ	M E BAGINSKI	NGT 00-050-435	1037
45	AUBURN UNIV-AUBURN	E PRIOR	LARC	S RAO	NGT 00-050-974	1039
45	AUBURN UNIV-AUBURN	L EVANS	LARC	S M RAO	NGT 00-051-246	1043
45	TUSKEGEE UNIVERSITY	E J PENCIL	LERC	P K RAY	NAG 3-1582	1057
45	TUSKEGEE UNIVERSITY	G H FICHTL	MSFC	C V DORESWAMY	NAG 8-40	1058
45	UNIV ALA-BIRMINGHAM	D A SCHAEFER	MSFC	B ANDREWS	NAS 8-39962	1077
45	UNIV ALA-HUNTSVILLE	T EDGE	MSFC	F D HO	NAG 8-108	1096
45	ARIZONA STATE UNIV	M C GILREATH	LARC	C A BALANIS	NAG 1-562	1266
45	ARIZONA STATE UNIV	G C BARBER	LARC	C A BALANIS	NAG 1-1082	1269
45	ARIZONA STATE UNIV	G C BARBER	LARC	C A BALANIS	NAG 1-1183	1272
45	ARIZONA STATE UNIV	D G SHIVELY	LARC	J T ABERLE	NAG 1-1630	1275
45	ARIZONA STATE UNIV	G R SUNDBERG	LERC	G G KARADY	NGT 3-1139	1282
45	UNIV OF ARIZONA	F C OWENS	HQ	J A REAGAN	NGT 00-050-704	1542
45	UNIV OF ARIZONA	J ALEXANDER	HQ	P N SLATER	NGT 00-050-920	1548
45	UNIV OF ARIZONA	E J PRIOR	LARC	J REAGAN	NGT 00-051-111	1552
45	UNIV OF ARIZONA	G SOFFEN	GSFC	R D SCHRIMPF	NGT 00-051-210	1557
45	UNIV ARKANSAS-LTL RK	A JOYCE	SSC	M K HUDSON	NGT 00-050-886	1583
45	UNIV ARKANSAS-LTL RK	A JOYCE	SSC	M K HUDSON	NGT 00-051-013	1584
45	UNIV ARKANSAS-LTL RK	A JOYCE	SSC	M K HUDSON	NGT 00-051-216	1585
45	CALIF INST OF TECH	F C OWENS	HQ	J C DOYLE	NGT 00-050-742	1698
45	CALIF INST OF TECH	H ASHKENAS	JPL	D RUFLEDGE	NGT 00-070-265	1713
45	STANFORD UNIVERSITY	P M GOORJIAN	ARC	R W MACCORMACK	NAG 2-686	1886
45	STANFORD UNIVERSITY	C H SCHULBACH	ARC	M J FLYNN	NAG 2-842	1890
45	STANFORD UNIVERSITY	W J WAGNER	HQ	P H SCHERRER	NAGW 2502	1928
45	STANFORD UNIVERSITY	F C OWENS	HQ	B WIDROW	NGT 00-050-642	2015
45	STANFORD UNIVERSITY	F MONTEGANI	LERC	U INAN	NGT 00-050-680	2016
45	STANFORD UNIVERSITY	F C OWENS	HQ	U S INAN	NGT 00-050-790	2019
45	STANFORD UNIVERSITY	F C OWENS	HQ	J F VESECKY	NGT 00-070-188	2034
45	STANFORD UNIVERSITY	P HUNTER	HQ	G TYLER	NGT 00-070-249	2036
45	STANFORD UNIVERSITY	D K RUSSELL	HQ	A A PETERSON	NGT 00-070-340	2041
45	UNIV CALIF-BERKELEY	D HOLLAND	HQ	E HALLER	NGT 00-051-303	2230
45	UNIV CALIF-DAVIS	J M BUDINGER	LERC	G R REDINEO	NAG 3-1166	2244
45	UNIV CALIF-DAVIS	P GOORJIAN	ARC	A KNOESEN	NCA 2-780	2271
45	UNIV CALIF-IRVINE	J E DORBAND	GSFC	I D SHERSON	NAG 5-2561	2318
45	UNIV CALIF-L ANGELES	M C GILREATH	LARC	N G ALEXOPOULOS	NAG 1-1349	2345
45	UNIV CALIF-S BARBARA	A WOO	ARC	H LEE	NCA 2-668	2660
45	COLORADO STATE UNIV	F C OWENS	HQ	M THOMPSON	NGT 00-050-848	2802
45	UNIV COLORADO-BOLDR	E A BOBINSKY	LERC	J N PELTON	NAG 3-1383	2837
45	UNIV COLORADO-BOLDR	J W SUNKEL	JSC	K C PARK	NAG 9-574	2930
45	UNIV COLORADO-BOLDR	V C VANDERBILT	ARC	B J VANZEGHHBROECK	NCA 2-788	3041
45	UNIV COLORADO-BOLDR	V C VANDERBILT	ARC	B J VAN ZEGHBROECK	NCC 2-5067	3046

NASA'S UNIVERSITY PROGRAM

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FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
45	UNIV COLORADO-BOLDR	F C OWENS	HQ	K M JOHNSON	NGT 00-050-592	3070
45	UNIV COLORADO-BOLDR	F SIX	MSFC	R FREHLICH	NGT 00-051-206	3099
45	UNIV COLORADO-BOLDR	L EVANS	LARC	A MICHELSON	NGT 00-051-257	3102
45	UNIV COLORADO-BOLDR	J T LYNCH	HQ	C E FOSHA	NGT 00-070-291	3111
45	UNIV COLORADO-BOLDR	F MONTEGRANI	LERC	D G MEYER	NGT 00-070-301	3112
45	UNIV COLORADO-DENVER	D I SOLOWAY	LARC	J T BIALASIEWICZ	NAG 1-1444	3117
45	UNIV OF CONNECTICUT	T KOSTIUK	GSFC	P K CHEO	NAG 5-2248	3142
45	UNIV OF DELAWARE	H LUM	ARC	D L MILLS	NAG 2-638	3182
45	UNIV OF DELAWARE	H ASHKERAS	JPL	K HUNSPERGER	NGT 00-050-889	3204
45	HOWARD UNIVERSITY	J A POWELL	LERC	G L HARRIS	NAG 3-1406	3234
45	HOWARD UNIVERSITY	J F SELLERS	LERC	J A MOMOH	NAG 3-1426	3235
45	HOWARD UNIVERSITY	D F NOGA	LERC		NAG 3-1661	3237
45	HOWARD UNIVERSITY	A S BURGESS	GSFC	R CHOWDHARY	NAG 5-1049	3240
45	HOWARD UNIVERSITY	H ASKHENAS	JPL	J A MOMEH	NGT 00-050-973	3248
45	CATHOLIC UNIVERSITY	T PREMACK	GSFC	C C NGUYEN	NAG 5-780	3257
45	UNIV DIST COLUMBIA	C ALLEN	GSFC	S LAKEOU	NAG 5-2348	3274
45	FLORIDA INST OF TECH	L F LOLLAR	MSFC	R A MORRIS	NAS 8-39385	3323
45	UNIV OF CENTRAL FLA	N E SLIWA	KSC	J M RAGUSA	NAG10-116	3376
45	UNIV OF CENTRAL FLA	J E HANLON	KSC	C G CHRISTODOULOU	NAG10-126	3383
45	UNIV OF FLORIDA	M SCOTT	KSC	E M THOMSON	NAG10-135	3434
45	UNIV OF SO FLORIDA	S LITTLE	MSFC	S N BUSANSKY	NCC 8-31	3496
45	GEORGIA INST OF TECH	J H TUCKER	LARC	V K MADISETTI	NAG 1-1624	3529
45	GEORGIA INST OF TECH	P S YEH	GSFC	M J SMITH	NAG 5-2187	3551
45	GEORGIA INST OF TECH	L G CLARK	LARC	M D BLUE	NAS 1-14654	3569
45	GEORGIA INST OF TECH	R L O'NEAL	LARC	T K GAYLORD	NAS 1-15370	3570
45	GEORGIA INST OF TECH	J ALEXANDER	HQ	A J GASIEWSKI	NGT 00-050-903	3590
45	GEORGIA INST OF TECH	F SIX	MSFC	W T RHODES	NGT 00-051-042	3592
45	GEORGIA INST OF TECH	D K RUSSELL	HQ	R GERHARDT	NGT 00-070-356	3606
45	MERCER UNIV-CENTR OF	D STILWELL	JSC	E M O'BRIEN	NAG 9-645	3623
45	SPELMAN COLLEGE	B WHITE	HQ	E FALCONER	NGT 00-090-003	3627
45	UNIV OF HAWAII-MANOA	D RUSSELL	HQ	J LASKAR	NGT 00-070-385	3757
45	UNIV OF IDAHO	W MILLER	GSFC	G K MAKI	NAS 5-26534	3759
45	UNIV ILLINOIS-CHICGO	A C WOO	ARC	K R UMASHANKAR	NAG 2-868	3922
45	UNIV ILLINOIS-URBANA	H LOMAX	ARC	J E SCHUTT-AINE	NAG 2-823	3939
45	UNIV ILLINOIS-URBANA	A C WOO	ARC	W C CHEW	NAG 2-871	3942
45	UNIV ILLINOIS-URBANA	A J ZAMAN	LERC	S W LEE	NAG 3-1474	3955
45	UNIV ILLINOIS-URBANA	G FUJIKAWA	LERC	S W LEE	NCC 3-156	3991
45	UNIV ILLINOIS-URBANA	R Q LEE	LERC	S W LEE	NCC 3-216	3992
45	UNIV ILLINOIS-URBANA	M MOORE	ARC	B W WAH	NGT 00-051-339	4003
45	UNIV ILLINOIS-URBANA	F C OWENS	HQ	M J KUSHNER	NGT 00-070-107	4005
45	INDIANA U-SOUTH BEND	P HUNTER	HQ	A ECER	NGT 00-051-172	4036
45	PURDUE UNIVERSITY	V VANDERBILT	ARC	L BIEHL	NCA 2-751	4093
45	PURDUE UNIVERSITY	F MONTEGANI	LERC	J L GRAY	NGT 00-050-867	4104
45	PURDUE UNIVERSITY	J K ALEXANDER	HQ	H J SIEGEL	NGT 00-050-961	4107
45	UNIV OF NOTRE DAME	R L BEXTEN	LERC	D J COSTELLO	NAG 3-1549	4125
45	IOWA STATE UNIV	M NAMKUNG	LARC	W L LORD	NAG 1-1129	4144
45	IOWA STATE UNIV	E PRIOR	LARC	W LORD	NGT 00-050-991	4179
45	IOWA STATE UNIV	G SOFFEN	GSFC	J P BASART	NGT 00-051-020	4181
45	UNIV OF KANSAS	F C OWENS	HQ	D HAVERKAMP	NGT 00-050-604	4273
45	UNIV OF KANSAS	G SOFFEN	GSFC	S P GOGINENI	NGT 00-051-021	4276
45	UNIV OF KANSAS	G LESANE	HQ	R K MOORE	NGT 00-051-123	4277
45	CAPITOL COLLEGE	D MENCHAN	GSFC	J JARRELL	NGT 00-090-063	4389
45	JOHNS HOPKINS UNIV	B ABSHIRE	GSFC	M DAVIDSON	NAG 5-2232	4427
45	UNIV MARYLAND-COL PK	B MOTT	GSFC	A A ILIADIS	NAG 5-2340	4590
45	UNIV MARYLAND-COL PK	D M CORNWALL	GSFC	M DAGENAIS	NAG 5-2359	4592
45	UNIV MARYLAND-COL PK	G SOFFEN	GSFC	J JAJA	NGT 00-050-951	4716
45	UNIV MARYLAND-COL PK	G SOFFEN	GSFC	M DAGENAIS	NGT 00-051-017	4718
45	UNIV MD-EASTRN SHORE	D MENCHAN	GSFC	R E MULLER	NCA 5-99	4726
45	U OF MD BALTIMOR CTY	B D SEERY	GSFC	J M MORRIS	NAG 5-2194	4728
45	MASS INST OF TECH	M D KANKAM	LERC	S D UMANS	NAG 3-1510	4905

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
45	UNIV OF MASS-AMHERST	F C OWENS	HQ	C T SWITT	NGT 00-050-606	5128
45	UNIV OF MASS-AMHERST	F C OWENS	HQ	R E MCINTOSH	NGT 00-050-772	5129
45	UNIV OF MASS-AMHERST	F C OWENS	HQ	K M LAU	NGT 00-050-828	5130
45	UNIV OF MASS-AMHERST	C HIX	JPL	R E MCINTOSH	NGT 00-051-277	5131
45	UNIV OF MASS-AMHERST	F C OWENS	HQ	K M LAU	NGT 00-070-234	5133
45	MICHIGAN STATE UNIV	C R MERCER	LERC	H J SCHOCK	NAG 3-1304	5166
45	UNIV MICH-ANN ARBOR	F B BECK	LARC	J L VOLAKIS	NAG 1-1478	5205
45	UNIV MICH-ANN ARBOR	A C WOO	ARC	J L VOLAKIS	NAG 2-866	5213
45	UNIV MICH-ANN ARBOR	S A ALTEROVITZ	LERC	P K BHATTACHARGA	NAG 3-988	5215
45	UNIV MICH-ANN ARBOR	A C WOO	ARC	J L VOLAKIS	NCA 2-653	5314
45	UNIV MICH-ANN ARBOR	A C WOO	ARC	J L VOLAKIS	NCA 2-839	5316
45	UNIV MICH-ANN ARBOR	F SIX	MSFC	B E GILCHRIST	NGT 00-051-166	5341
45	WAYNE STATE UNIV	D J BRINKER	LERC	J R WOODYARD	NAG 3-833	5351
45	MISSISSIPPI STATE U	G L SETTLE	MSFC	R J MOORHEAD	NAG 8-866	5448
45	UNIV MISS-UNIVERSITY	M W SUITS	MSFC	R HICKLING	NAS 8-39745	5469
45	UNIV NEBRASKA-LINCLN	D A JAWORSKE	LERC	J A WOOLLAM	NAG 3-95	5580
45	UNIV NEBRASKA-LINCLN	W A WHYTE	LERC	K SAYOOD	NAG 3-806	5581
45	UNIV NEBRASKA-LINCLN	P SHU YEH	GSFC	K SAYOOD	NAG 5-1612	5585
45	UNIV NEBRASKA-LINCLN	F MONTEGANI	LERC	K SAVOOD	NGT 00-070-280	5603
45	DARTMOUTH COLLEGE	F C OWENS	HQ	B SONNERUP	NGT 00-050-798	5643
45	PRINCETON UNIVERSITY	R SYNDER	MSFC	D SAVILLE	NAG 8-878	5751
45	NEW MEX INST MINING	R BLAKESLEE	MSFC	M BROOK	NAG 8-66	5826
45	NEW MEX ST U-LAS CR	G SOFFEN	GSFC	W P OSBORNE	NGT 00-050-898	5861
45	CITY U OF NY CTY COL	B S GOOD	LERC	R R ALFANO	NAG 3-1490	5899
45	CORNELL UNIVERSITY	F C OWENS	HQ	M C KELLEY	NGT 00-070-117	6115
45	CORNELL UNIVERSITY	F C OWENS	HQ	M C KELLEY	NGT 00-070-217	6116
45	CUNY-LAG'RDIA CMTY C	D K RUSSELL	HQ	C WATKINS	NGT 00-090-053	6124
45	POLYTECHNIC U	F L PITTS	LARC	M L SHOOMAN	NAG 1-1272	6140
45	RENSSELAER POLY-NY	G SOFFEN	GSFC	H STEPHANON	NGT 00-070-272	6186
45	STATE U NY-BINGHAMTN	R C CULL	LERC	D C HOPKINS	NAG 3-1464	6223
45	STATE UNIV NY-BUFFAL	S DOMITZ	LERC	J R LAGHARI	NAG 3-1345	6232
45	UNIV OF ROCHESTER	M D BICAY	HQ	M J WENGLER	NAGW 2514	6316
45	UNIV OF ROCHESTER	P GOORJIAN	ARC	G AGRAWL	NCA 2-827	6318
45	UNIV OF ROCHESTER	E PRIOR	LARC	G W WICKS	NGT 00-051-109	6321
45	NO CAR A&T STATE U	I WEINBERG	LERC	W COLLY	NAG 3-976	6364
45	NO CAROLINA STATE U	D K RUSSELL	HQ	W ALEXANDER	NGT 00-070-344	6426
45	NO CAROLINA STATE U	D K RUSSELL	HQ	W E ALEXANDER	NGT 00-070-402	6427
45	CASE WESTERN RESERVE	A J RATAJCZAK	LERC	S OSTRACH	NAG 3-886	6474
45	CASE WESTERN RESERVE	J L DOLCE	LERC	Y PAO	NAG 3-922	6475
45	CASE WESTERN RESERVE	G BEHEIM	LERC	M TABIB-AZAR	NAG 3-1473	6496
45	CASE WESTERN RESERVE	K B BHASIN	LERC	P C CLASPY	NCC 3-99	6517
45	CASE WESTERN RESERVE	L G MATUS	LERC	M MEHREGANY	NCC 3-253	6532
45	CASE WESTERN RESERVE	G BEHEIM	LERC	M J AZAR	NCC 3-259	6535
45	CASE WESTERN RESERVE	P G NEUDECK	LERC	M TABIB-AZAR	NCC 3-294	6545
45	CASE WESTERN RESERVE	D K RUSSELL	HQ	S PHILLIPS	NGT 00-070-351	6571
45	CLEVELAND STATE UNIV	I WEINBERG	LERC	C GORADIA	NAG 3-658	6578
45	CLEVELAND STATE UNIV	H KIM	LERC	P CHU	NAG 3-1379	6587
45	CLEVELAND STATE UNIV	J A KOBAK	LERC	G L KRAMERICH	NCC 3-163	6609
45	CLEVELAND STATE UNIV	M J CONROY	LERC	D ZEGHLACHE	NCC 3-201	6612
45	CLEVELAND STATE UNIV	J C DELAAT	LERC	F E VILLASECA	NCC 3-257	6617
45	CUYAHOGA COMMUNITY C	C W SLAUTER	LERC	R TALERICO	NCA 3-12	6638
45	JOHN CARROLL UNIV	G BEHEIM	LERC	K FRITSCH	NAG 3-571	6643
45	OHIO STATE UNIV	G C BARBER	LARC	E H NEWMAN	NAG 1-1058	6657
45	OHIO STATE UNIV	A C WOO	ARC	R LEE	NAG 2-870	6662
45	OHIO STATE UNIV	E A BOBINSKY	LERC	S C AHALT	NAG 3-1164	6668
45	OHIO STATE UNIV	E RHO	LERC	P H PATHAK	NAG 3-1359	6671
45	OHIO STATE UNIV	I WEINBERG	LERC	S A RINGEL	NAG 3-1461	6677
45	OHIO STATE UNIV	E RHO	LERC	W D BURNSIDE	NAG 3-1496	6679
45	OHIO STATE UNIV	E RHO	LERC	W D BURNSIDE	NAG 3-1497	6680
45	OHIO STATE UNIV	E RHO	LERC	P H PATHAK	NAG 3-1649	6685

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
45	OHIO STATE UNIV	R R KUNATH	LERC	W D BURNSIDE	NAS 3-26305	6714
45	OHIO STATE UNIV	J D WALKER	LERC	G J VALCO	NCC 3-341	6722
45	OHIO STATE UNIV	M C GILREATH	LARC	W D BURNSIDE	NSG-1498	6732
45	OHIO STATE UNIV	M C GILREATH	LARC	W D BURNSIDE	NSG-1613	6733
45	OHIO UNIVERSITY	F R MORRELL	LARC	R H MCFARLAND	NGR36-9017	6739
45	UNIV OF AKRON	G ADAUIOVSKY	LERC	S I HARIHARAN	NCC 3-283	6777
45	UNIV OF AKRON	F MONTEGANI	LERC	M ELBULUK	NGT 00-051-182	6780
45	UNIV OF CINCINNATI	D J LARKIN	LERC	A J STECKI	NAG 3-1555	6797
45	UNIV OF CINCINNATI	R R KUNATH	LERC	K P ROENKER	NCC 3-252	6812
45	UNIV OF CINCINNATI	F MONTEGANI	LERC	V J KAPOOR	NGT 00-051-234	6822
45	UNIV OF CINCINNATI	F C OWENS	HQ	S G RUBIN	NGT 00-070-168	6825
45	UNIV OF TOLEDO	J M BUDINGER	LERC	S C KWATRA	NAG 3-799	6838
45	UNIV OF TOLEDO	J A HAMLEY	LERC	T J STUART	NAG 3-1576	6855
45	UNIV OF TOLEDO	R O LEE	LERC	K F LEE	NCC 3-126	6868
45	UNIV OF TOLEDO	R A MENU	LERC	K J DE WITT	NCC 3-260	6875
45	CARNEGIE-MELLON UNIV	V C OWENS	HQ	T KANADE	NGT 00-050-559	6999
45	CARNEGIE-MELLON UNIV	E J PRIOR	LARC	T KANADE	NGT 00-050-990	7002
45	CARNEGIE-MELLON UNIV	C HIX	JPL	R SIMMONS	NGT 00-051-039	7005
45	CARNEGIE-MELLON UNIV	F SIX	MSFC	E KROTKOV	NGT 00-051-045	7006
45	CARNEGIE-MELLON UNIV	S GOLDSTEIN	JSC	B V KUMAR	NGT 00-051-231	7008
45	DREXEL UNIVERSITY	F L PITTS	LARC	L A TRACHTENBERG	NAG 1-1124	7014
45	DREXEL UNIVERSITY	D I SOLOWAY	LARC	S GRAY	NCC 1-171	7026
45	DREXEL UNIVERSITY	R R KUNATH	LERC	A S DARYOUSH	NCC 3-149	7027
45	PENN STATE U-UNIV PK	F B BECK	LARC	R J LUEBBERS	NAG 1-1350	7047
45	PENN STATE U-UNIV PK	F B BECK	LARC	R J LUEBBERS	NAG 1-1504	7057
45	PENN STATE U-UNIV PK	A C WOO	ARC	R J LUEBBERS	NAG 2-867	7065
45	UNIV OF PITTSBURGH	G E SCHWARZE	LERC	W R WIESERMAN	NAG 3-945	7218
45	UNIV OF PITTSBURGH	R C CULL	LERC	G L KUSIC	NAG 3-1545	7221
45	BROWN UNIVERSITY	G SOFFEN	GSFC	N M LAWANDY	NGT 00-050-755	7297
45	CLEMSON UNIV-CLEMSON	A I MACKENZIE	LARC	E G BAXA	NAG 1-928	7334
45	CLEMSON UNIV-CLEMSON	L D STATON	LARC	E G BAXA	NAG 1-1634	7338
45	CLEMSON UNIV-CLEMSON	T BENNETT	GSFC	A S COLLINS	NAS 5-32462	7350
45	CLEMSON UNIV-CLEMSON	E PRIOR	LARC	E G BAXA	NGT 00-050-975	7357
45	VANDERBILT UNIVERSITY	G I JOHNSTON	HQ	A M STRAUSS	NAGW 2030	7469
45	LAMAR UNIVERSITY	S FISHER	JSC	W E SIMON	NAG 9-626	7501
45	PRAIRIE VIEW A&M U	G D ARNDT	JSC	C L TOLLIVER	NAG 9-318	7512
45	PRAIRIE VIEW A&M U	G D ARNDT	JSC	J FOSTER	NAG 9-763	7518
45	RICE UNIVERSITY	C HESS	JSC	I D WALKER	NAG 9-740	7543
45	RICE UNIVERSITY	F C OWENS	HQ	R DE FIGUEIREDO	NGT 00-050-379	7564
45	RICE UNIVERSITY	F C OWENS	HQ	D H JOHNSON	NGT 00-050-447	7565
45	TEXAS A&M UNIVERSITY	J M BOZEK	LERC	F LITTLE	NAG 3-1368	7606
45	TEXAS A&M UNIVERSITY	J D BURKE	JSC	M EHSANI	NAG 9-431	7628
45	TEXAS A&M UNIVERSITY	D L BELANGER	JSC	A J APPLEBY	NAG 9-598	7633
45	TEXAS A&M UNIVERSITY	K MILLER	JSC	J SEYED-YAGOOBI	NAG 9-730	7640
45	TEXAS A&M UNIVERSITY	D BELLANGER	JSC	M EHSANI	NAG 9-751	7642
45	TEXAS A&M UNIVERSITY	C LIVINGSTON	HQ	F R BEST	NAGW 1194	7643
45	TEXAS A&M UNIVERSITY	F C OWENS	HQ	F BEST	NGT 00-050-595	7667
45	TEXAS A&M UNIVERSITY	D K RUSSELL	HQ	K CHANG	NGT 00-070-304	7680
45	TEXAS TECH UNIV	F L PITTS	LARC	T F TROST	NAG 1-1510	7704
45	TEXAS TECH UNIV	C K GARY	ARC	J F WALKUP	NAG 2-878	7705
45	TEXAS TECH UNIV	E J PENCIL	LERC	M KRISTIANSEN	NAG 3-1672	7709
45	TEXAS TECH UNIV	J A VILLARREAL	JSC	S MITRA	NAG 9-673	7710
45	UNIV HOUSTON	J W SUNKEL	JSC	L S SHIEH	NAG 9-380	7718
45	UNIV HOUSTON	P NGO	JSC	J C WOLFE	NAG 9-441	7720
45	UNIV HOUSTON	H NGUYEN	JSC	H A OGMEN	NAG 9-578	7727
45	UNIV HOUSTON	P NGO	JSC	J T WILLIAMS	NAG 9-593	7729
45	UNIV HOUSTON	J W SUNKEL	JSC	L S SHIEH	NAG 9-746	7740
45	UNIV TEXAS-ARLINGTON	F C OWENS	HQ	A K FUNG	NGT 00-050-585	7811
45	UNIV TEXAS-ARLINGTON	F C OWENS	HQ	A K FUNG	NGT 00-050-844	7812
45	UNIV TEXAS-AUSTIN	A J ZAMAN	LERC	H LING	NAG 3-1589	7830

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
45	UNIV TEXAS-AUSTIN	K BAKER	JSC	A C BOVIK	NAG 9-666	7855
45	UNIV TEXAS-AUSTIN	A J ZAMAN	LERC	H LING	NCC 3-273	7904
45	UNIV TEXAS-AUSTIN	D K RUSSELL	HQ	J CAMBELL	NGT 00-070-338	7935
45	CHRISTPHR NEWPORT U	S G JURCZYK	LARC	R F HODSON	NAG 1-1439	8054
45	CHRISTPHR NEWPORT U	R S ROGOWSKI	LARC	A M BUONCRISTIANI	NAG 1-1443	8055
45	OLD DOMINION UNIV	P J HAYES	LARC	W STOUGHTON	NCC 1-136	8177
45	OLD DOMINION UNIV	D L GRAY	LARC	D L LIVINGSTON	NCC 1-164	8178
45	OLD DOMINION UNIV	J T LYNCH	HQ	A DHARAMSI	NGT 00-051-103	8187
45	OLD DOMINION UNIV	L EVANS	LARC	K H SCHOENBACH	NGT 00-051-188	8190
45	OLD DOMINION UNIV	E J PRIOR	LARC	S ALBIN	NGT 00-070-231	8194
45	OLD DOMINION UNIV	E PRIOR	LARC	J W STAUGHTON	NGT 00-070-296	8196
45	OLD DOMINION UNIV	J T LYNCH	HQ	S ALBIN	NGT 00-070-307	8198
45	OLD DOMINION UNIV	D K RUSSELL	HQ	S ALBIN	NGT 00-070-308	8199
45	UNIV OF VIRGINIA	P I CARRAWAY	LARC	E D TOWE	NAG 1-1434	8218
45	UNIV OF VIRGINIA	J LARIMER	ARC	M SHUR	NAG 2-872	8222
45	UNIV OF VIRGINIA	J A NCADOO	LARC	E TOWE	NCC 1-197	8265
45	UNIV OF VIRGINIA	F C OWENS	HQ	B W JOHNSON	NGT 00-050-578	8272
45	UNIV OF VIRGINIA	F C OWENS	HQ	S H JONES	NGT 00-050-647	8273
45	UNIV OF VIRGINIA	F C OWENS	HQ	T W CROWE	NGT 00-050-725	8276
45	UNIV OF VIRGINIA	F C OWENS	HQ	A W LICHTENBERGER	NGT 00-050-820	8280
45	UNIV OF VIRGINIA	J T LYNCH	HQ	N NANDHAKUMAR	NGT 00-051-055	8288
45	UNIV OF VIRGINIA	G LASANE	HQ	E TOWE	NGT 00-051-068	8290
45	UNIV OF VIRGINIA	D HOLLAND	HQ	T W CROWE	NGT 00-051-326	8296
45	UNIV OF VIRGINIA	F C OWENS	HQ	R J MATTAUCH	NGT 00-070-166	8299
45	UNIV OF VIRGINIA	D K RUSSELL	HQ	E TOWE	NGT 00-070-336	8305
45	VIRGINIA POLY INST	M C BAILEY	LARC	W L STUTZMAN	NAG 1-859	8318
45	VIRGINIA POLY INST	K K TEDJOJUWONO	LARC	R G MAY	NAG 1-1275	8327
45	VIRGINIA POLY INST	R S ROGOWSKI	LARC	R O CLAU	NAG 1-1508	8347
45	VIRGINIA POLY INST	B A MANNERS	LERC	F C LEE	NAG 3-1349	8362
45	VIRGINIA POLY INST	C L PARSONS	GSFC	G S BROWN	NAG 5-659	8368
45	VIRGINIA POLY INST	J M JAGIELSKI	GSFC	F C LEE	NAS 5-31442	8372
45	VIRGINIA POLY INST	F C OWENS	HQ	T PRATT	NGT 00-050-754	8383
45	VIRGINIA POLY INST	E PRIOR	LARC	W L STUTZMAN	NGT 00-070-295	8393
45	VIRGINIA POLY INST	D K RUSSELL	HQ	T POON	NGT 00-070-318	8395
45	UNIV OF WASHINGTON	J K ALEXANDER	HQ	R WEST	NGT 00-050-812	8552
45	WEST VIRGINIA UNIV	F C OWENS	HQ	S N DWIVEDI	NGT 00-050-671	8594
45	UNIV WISC-MADISON	L M TAYLOR	LERC	T A LIPO	NAG 3-1447	8632
45	UNIV WISC-MADISON	J O LARIMER	ARC	B E SALEH	NCC 2-780	8741
45	U PUERTO RICO-MAYAGZ	A JOYCE	SSC	R E VASQUEZ	NGT 00-051-340	8797
45	U PUERTO RICO-MAYAGZ	D K RUSSELL	HQ	R VASQUEZ	NGT 00-070-362	8807
45	TEL-AVIV UNIVERSITY	D J FLOOD	LERC	J APPELBAUM	NAGW 2022	8835
46	AUBURN UNIV-AUBURN	B G PENN	MSFC	D W MACKOWSKI	NAG 8-977	1025
46	AUBURN UNIV-AUBURN	F C OWENS	HQ	M J CROCKER	NGT 00-050-402	1036
46	AUBURN UNIV-AUBURN	D K RUSSEL	HQ	G T FLOWERS	NGT 00-070-312	1044
46	AUBURN UNIV-AUBURN	D K RUSSELL	HQ	S C SINHA	NGT 00-070-384	1045
46	UNIV ALA-HUNTSVILLE	D O FRAZIER	MSFC	R J HUNG	NCC 8-38	1167
46	UNIV ALA-HUNTSVILLE	F C OWENS	HQ	W P SCHONBERG	NGT 00-050-643	1170
46	UNIV ALA-HUNTSVILLE	F C OWENS	HQ	Z MUSIELAK	NGT 00-050-701	1172
46	UNIV ALA-HUNTSVILLE	F SIX	MSFC	J A GILBERT	NGT 00-050-881	1175
46	UNIV ALA-HUNTSVILLE	F C OWENS	HQ	G R KARR	NGT 00-070-159	1180
46	UNIV ALA-HUNTSVILLE	F S SIX	MSFC	G KARR	NGT 00-070-240	1181
46	UNIV ALA-TUSCALOOSA	K S TYGIELSKI	MSFC	C B EVCES	NAG 8-154	1197
46	UNIV ALA-TUSCALOOSA	C COLLEY	MSFC	C R EVCES	NAG 8-813	1201
46	UNIV ALA-TUSCALOOSA	J VARGOS	MSFC	R W WHITAKER	NAG 8-988	1203
46	UNIV ALA-TUSCALOOSA	J VARGAS	MSFC	J PARKER	NAG 8-1025	1204
46	UNIV ALA-TUSCALOOSA	F E LEDBETTER	MSFC	A L HIGHSMITH	NAG 8-1059	1207
46	UNIV ALA-TUSCALOOSA	F SIX	HQ	L T WORTZ	NGT 00-070-302	1216
46	UNIV ALA-TUSCALOOSA	D K RUSSELL	HQ	J K PARKER	NGT 00-070-379	1218
46	UNIV OF ARIZONA	A TESSLER	LARC	E MADENCI	NAG 1-1626	1352
46	UNIV OF ARIZONA	G A LESANE	HQ	C F CHEN	NGT 00-051-363	1566

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
46	UNIV OF ARIZONA	D K RUSSELL	HQ	A ORTEGA	NGT 00-070-403	1568
46	CALIF INST OF TECH	H P STINSON	MSFC	C E BRENNEN	NAG 8-937	1620
46	HARVEY MUDD COLLEGE	J JENNER	ARC	C DYM	NCC 2-5016	1775
46	SAN FRAN STATE UNIV	H NELSON	ARC	M M ABO-ELL-ATA	NCA 2-639	1791
46	SAN FRAN STATE UNIV	G M MULENBURG	ARC	P PFAELZER	NCA 2-835	1796
46	SANTA CLARA UNIV	R D MACELROY	ARC	M A SAAD	NCA 2-696	1863
46	SANTA CLARA UNIV	R D MACELROY	ARC	D D SILJAK	NCA 2-697	1864
46	STANFORD UNIVERSITY	L M CARNEY	LERC	M A CAPPELLI	NAG 3-1040	1897
46	STANFORD UNIVERSITY	K S CHUN	LERC	R K HANSON	NAG 3-1185	1899
46	STANFORD UNIVERSITY	B WEBBON	ARC	B LUSIGNAN	NCA 2-704	1956
46	STANFORD UNIVERSITY	J A CAVOLOWSKY	ARC	R K HANSON	NCA 2-706	1957
46	STANFORD UNIVERSITY	R T WHALEN	ARC	D CARTER	NCA 2-748	1959
46	STANFORD UNIVERSITY	D A JOHNSON	ARC	J K EATON	NCA 2-754	1961
46	STANFORD UNIVERSITY	H NELSON	ARC	D NELSON	NCA 2-767	1963
46	STANFORD UNIVERSITY	M INOUE	ARC	P MOIN	NCC 2-460	1977
46	STANFORD UNIVERSITY	F C OWENS	HQ	P BRADSHAW	NGT 00-050-445	2013
46	STANFORD UNIVERSITY	F C OWENS	HQ	D R CARTER	NGT 00-050-564	2014
46	STANFORD UNIVERSITY	M MOORE	ARC	R J MOFFAT	NGT 00-051-028	2024
46	STANFORD UNIVERSITY	F MONTEGANI	LERC	M CAPPELLI	NGT 00-051-238	2027
46	STANFORD UNIVERSITY	M MOORE	ARC	L LEIFER	NGT 00-070-275	2037
46	STANFORD UNIVERSITY	D K RUSSELL	HQ	J POWELL	NGT 00-070-361	2044
46	UNIV CALIF-BERKELEY	B S SINGH	LERC	V P CAREY	NAG 3-1633	2060
46	UNIV CALIF-BERKELEY	H D ROSS	LERC	A C FERNANDEZ-PELLO	NCC 3-239	2193
46	UNIV CALIF-BERKELEY	P HUNTER	HQ	M HOLT	NGT 00-051-030	2219
46	UNIV CALIF-BERKELEY	G LESANE	HQ	A C FERNANDEZ-PELLO	NGT 00-051-268	2225
46	UNIV CALIF-BERKELEY	D K RUSSELL	HQ	M HOLT	NGT 00-070-309	2231
46	UNIV CALIF-BERKELEY	D K RUSSELL	HQ	F HURLEUT	NGT 00-070-310	2232
46	UNIV CALIF-DAVIS	K J WEILAND	LERC	R C ALDREDGE	NAG 3-1558	2245
46	UNIV CALIF-DAVIS	F CARADONNA	ARC	M M HAFEZ	NCA 2-737	2266
46	UNIV CALIF-DAVIS	J B HAGGARD	LERC	B D SHAW	NCC 3-245	2295
46	UNIV CALIF-DAVIS	F P CHIARAMONTE	LERC	B D SHAW	NCC 3-353	2296
46	UNIV CALIF-IRVINE	H D ROSS	LERC	S E ELGHOBASHI	NAG 3-1605	2313
46	UNIV CALIF-IRVINE	F C OWENS	HQ	W E SCHMITENDORT	NGT 00-050-551	2336
46	UNIV CALIF-L ANGELES	R L THOMPSON	LERC	R E KELLY	NAG 3-1456	2360
46	UNIV CALIF-L ANGELES	R FRIEDMAN	LERC	G E APOSTOLAKIS	NAS 3-25975	2464
46	UNIV CALIF-SAN DIEGO	K W BAKER	LERC	K O LUND	NAG 3-1243	2507
46	UNIV CALIF-SAN DIEGO	H D ROSS	LERC	F A WILLIAMS	NAG 3-1248	2508
46	UNIV CALIF-SAN DIEGO	O MEHMED	LERC	J B KOSMATKA	NCC 3-173	2602
46	UNIV CALIF-SAN DIEGO	O MEHMER	LERC	J B KOSMATKA	NCC 3-309	2603
46	UNIV CALIF-SAN DIEGO	F C OWENS	HQ	J B KOSMATKA	NGT 00-070-191	2611
46	UNIV CALIF-SAN DIEGO	F C OWENS	HQ	G RICLES	NGT 00-070-224	2612
46	UNIV OF SOUTHERN CAL	K J WEILAND	LERC	P D RONNEY	NAG 3-1523	2713
46	UNIV OF SOUTHERN CAL	S C OLSON	LERC	P D RONNEY	NAG 3-1611	2714
46	UNIV OF SOUTHERN CAL	H D ROSS	LERC	F N EGOLFOPOULOS	NAG 3-1615	2715
46	UNIV OF SOUTHERN CAL	B S SINGH	LERC	P D RONNEY	NAG 3-1653	2718
46	UNIV OF SOUTHERN CAL	B C CARPENTER	HQ	S S SADHAL	NAGW 3378	2737
46	UNIV OF SOUTHERN CAL	G A LESANE	HQ	P D RONNEY	NGT 00-051-358	2753
46	COLORADO STATE UNIV	D A HOPKINS	LERC	P R HEYLIGER	NAG 3-1520	2772
46	COLORADO STATE UNIV	G I JOHNSTON	HQ	M E CRISWELL	NAGW 2069	2784
46	UNIV COLORADO-BOLDR	G L GILES	LARC	K C PARK	NAG 1-756	2808
46	UNIV COLORADO-BOLDR	W H PROSSER	LARC	W P RODGERS	NAG 1-1390	2813
46	UNIV COLORADO-BOLDR	R E GILLIAN	LARC	C FARHAT	NAG 1-1391	2814
46	UNIV COLORADO-BOLDR	H G BUSH	LARC	M M MIKULAS	NAG 1-1483	2817
46	UNIV COLORADO-BOLDR	H G BUSH	LARC	L D PETERSON	NAG 1-1490	2818
46	UNIV COLORADO-BOLDR	R FRIEDMAN	LERC	M C BRANCH	NAG 3-1257	2834
46	UNIV COLORADO-BOLDR	H D ROSS	LERC	J R HERTZBERG	NAG 3-1616	2843
46	UNIV OF CONNECTICUT	A D FREED	LERC	E H JORDAN	NAG 3-1258	3140
46	YALE UNIVERSITY	D P STOCKER	LERC	A GOMEZ	NAG 3-1259	3154
46	YALE UNIVERSITY	H D ROSS	LERC	M D SMOOKE	NAG 3-1625	3155
46	GEORGE WASHINGTON U	R G KVATERNIK	LARC	R H TOLSON	NAG 1-1416	3213

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
46	HOWARD UNIVERSITY	D F NOGA	LERC	R REISS	NAG 3-1445	3236
46	FLORIDA ATLANTIC U	M LITTLEFIELD	KSC	W L CHOW	NAG10-83	3312
46	FLORIDA STATE UNIV	Y C CHO	ARC	L LOURENCO	NAG 2-809	3330
46	FLORIDA STATE UNIV	F SIX	MSFC	T N KRISHNAMURTI	NGT 00-070-258	3366
46	UNIV OF CENTRAL FLA	J ALIBERTI	KSC	A T RAISSI	NAG10-82	3372
46	UNIV OF CENTRAL FLA	R M DAVIS	KSC	E A MOSLEKY	NAG10-117	3377
46	UNIV OF FLORIDA	K P KUNDU	LERC	N S WINOWICH	NAG 3-1340	3408
46	UNIV OF SO FLORIDA	M O DUSTIN	LERC	R A CRANE	NAG 3-851	3481
46	GEORGIA INST OF TECH	D SOLOWAY	LARC	W J BOOK	NAG 1-623	3513
46	GEORGIA INST OF TECH	J T WANG	LARC	S N ATLURI	NAG 1-1319	3520
46	GEORGIA INST OF TECH	R W VERNON	LERC	G P NEITZEL	NAG 3-1221	3540
46	GEORGIA INST OF TECH	R L THOMPSON	LERC	G P NEITZEL	NAG 3-1454	3542
46	GEORGIA INST OF TECH	J P SKARDA	LERC	M K SMITH	NAG 3-1455	3543
46	GEORGIA INST OF TECH	J M LUCERO	LERC	O G MCGEE	NAG 3-1571	3545
46	GEORGIA INST OF TECH	G C FRALICK	LERC	L J FORNEY	NCC 3-302	3583
46	GEORGIA INST OF TECH	F C OWENS	HQ	H A EMST	NGT 00-050-641	3586
46	GEORGIA INST OF TECH	D A HOLLAND	HQ	G P NEITZEL	NGT 00-051-088	3593
46	GEORGIA INST OF TECH	J T LYNCH	HQ	KEMPER	NGT 00-051-102	3595
46	GEORGIA INST OF TECH	F T LYNCH	HQ	K A CUNEFARE	NGT 00-051-115	3597
46	GEORGIA INST OF TECH	F MONTEGANI	LERC	D L MCDOWELL	NGT 00-051-178	3599
46	GEORGIA INST OF TECH	G LESANE	HQ	G P NEITZEL	NGT 00-051-266	3602
46	GEORGIA INST OF TECH	G A LESANE	HQ	M K SMITH	NGT 00-051-346	3603
46	GEORGIA INST OF TECH	D K RUSSELL	HQ	W J WEPFER	NGT 00-070-254	3604
46	UNIV OF HAWAII-MANOA	A TESSLER	LARC	H R RIGGS	NAG 1-1487	3653
46	NORTHWESTERN UNIV	H D ROSS	LERC	M MATALON	NAG 3-1604	3785
46	NORTHWESTERN UNIV	S GOLDSTEIN	JSC	J E COLGATE	NGT 00-051-233	3825
46	NORTHWESTERN UNIV	G A LESANE	HQ	S C BANKOFF	NGT 00-051-349	3827
46	UNIV ILLINOIS-CHICGO	A W BURNER JR.	LARC	S S CHA	NAG 1-1594	3920
46	UNIV ILLINOIS-CHICGO	D L BULZAN	LERC	S K AGGARWAL	NAG 3-796	3923
46	UNIV ILLINOIS-CHICGO	D L BULZAN	LERC	S K AGGARWAL	NAG 3-1135	3925
46	UNIV ILLINOIS-CHICGO	R F HANDSCHUH	LERC	F L LITVIN	NAG 3-1469	3926
46	UNIV ILLINOIS-CHICGO	R F HANDSCHUH	LERC	F L LITVIN	NAG 3-1607	3927
46	UNIV ILLINOIS-CHICGO	H D ROSS	LERC	M Y CHOI	NAG 3-1631	3928
46	UNIV ILLINOIS-CHICGO	N G ROBERTSON	JSC	K M HURLBERT	NAG 9-764	3929
46	UNIV ILLINOIS-URBANA	K O ZAMAN	LERC	M B BRAGG	NAG 3-1374	3954
46	UNIV ILLINOIS-URBANA	M J VALCO	LERC	R P LUCHT	NAG 3-1552	3956
46	UNIV ILLINOIS-URBANA	G A LESANE	HQ	A J PEARLSTEIN	NGT 00-051-360	4004
46	UNIV ILLINOIS-URBANA	P HUNTER	HQ	S P VANKA	NGT 00-070-292	4006
46	UNIV ILLINOIS-URBANA	D K RUSSELL	HQ	R B HABER	NGT 00-070-374	4007
46	PURDUE UNIVERSITY	W S JOHNSON	LARC	B M HILLBERRY	NAG 1-1316	4045
46	PURDUE UNIVERSITY	J T WANG	LARC	C T SUN	NAG 1-1323	4046
46	PURDUE UNIVERSITY	R J ROLLBUHLER	LERC	A F LEFEBVRE	NAG 3-552	4056
46	PURDUE UNIVERSITY	D E LACY	LERC	M W BLALOCK	NAG 3-1295	4063
46	PURDUE UNIVERSITY	F C OWENS	HQ	J S BOLTON	NGT 00-050-711	4101
46	PURDUE UNIVERSITY	F C OWENS	HQ	B HILLBERRY	NGT 00-050-717	4102
46	PURDUE UNIVERSITY	F MONTEGANI	LERC	S FLEETER	NGT 00-070-279	4113
46	IOWA STATE UNIV	D P MILLER	LERC	J H OLIVER	NAG 3-1318	4154
46	IOWA STATE UNIV	S A THORP	LERC	J H OLIVER	NAG 3-1481	4157
46	IOWA STATE UNIV	F C OWENS	HQ	R H FLETCHER	NGT 00-050-633	4174
46	IOWA STATE UNIV	F SIX	MSFC	A FLATAU	NGT 00-050-882	4177
46	IOWA STATE UNIV	F MONTEGANI	LERC	R H PLETCHER	NGT 00-050-949	4178
46	IOWA STATE UNIV	F SIX	MSFC	J E BERNARD	NGT 00-051-205	4182
46	IOWA STATE UNIV	L EVANS	LARC	A FLATAU	NGT 00-051-254	4183
46	UNIV OF IOWA	D STOCKER	LERC	L D CHEN	NAG 3-1592	4189
46	UNIV OF IOWA	E PRIOR	LARC	J S ARORA	NGT 00-050-976	4234
46	KANSAS STATE UNIV	J C NEWMAN	LARC	D V SWENSON	NAG 1-1503	4239
46	UNIV OF KANSAS	R W MIXON	LARC	B G BARR	NAG 1-912	4246
46	UNIV OF KANSAS	R E GAUGLER	LERC	S FAROKHI	NAG 3-1194	4248
46	UNIV OF KENTUCKY	K W BAKES	LERC	L L CHOW	NAG 3-1251	4290
46	UNIV OF KENTUCKY	K W BAKER	LERC	L C CHOW	NAG 3-1588	4291

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
46	TULANE UNIVERSITY	F C OWENS	HQ	E E MICHAELIDES	NGT 00-050-695	4368
46	UNIV OF NEW ORLEANS	A JOYCE	SSC	E P RUSSO	NGT 00-051-014	4372
46	UNIV OF NEW ORLEANS	A JOYCE	SSC	E P RUSSO	NGT 00-051-317	4374
46	UNIV OF NEW ORLEANS	D K RUSSELL	HQ	E RUSSO	NGT 00-070-324	4375
46	JOHNS HOPKINS UNIV	F C OWENS	HQ	A PROSPERETTI	NGT 00-050-486	4497
46	UNIV MARYLAND-COL PK	J M HOUSNER	LARC	S W LEE	NAG 1-1627	4532
46	UNIV MARYLAND-COL PK	J M VRANISH	GSFC	L W TSAI	NAG 5-2004	4580
46	UNIV MARYLAND-COL PK	G SOFFEN	GSFC	K E HEROLD	NGT 00-050-926	4715
46	BOSTON UNIVERSITY	F SIX	MSFC	T G BIFANO	NGT 00-050-878	4768
46	HARVARD UNIVERSITY	F CHIARAMONTE	LERC	G MCKINLEY	NAG 3-1385	4787
46	MASS INST OF TECH	T W ROBERTS	LARC	A T PATERA	NAG 1-1613	4874
46	MASS INST OF TECH	H A ALDRIDGE	LARC	S DUBROWSKY	NAG 1-1637	4875
46	MASS INST OF TECH	P T KERWIN	LERC	D G WILSON	NAG 3-1407	4901
46	MASS INST OF TECH	M M BRIGHT	LERC	J D PADUANO	NAG 3-1457	4904
46	MASS INST OF TECH	H ROSS	LERC	S HOCHGREB	NAG 3-1640	4909
46	MASS INST OF TECH	L S N	LERC	I A WALTZ	NAG 3-1664	4910
46	MASS INST OF TECH	L LI	JSC	J K SALISBURY	NAG 9-678	4971
46	MASS INST OF TECH	A B DOUGHERTY	HQ	W SEERING	NASW 4870	5054
46	TUFTS UNIVERSITY	F MONTEGANI	LERC	A SAIGAL	NGT 00-050-943	5100
46	UNIV OF MASS-AMHERST	D G LEWICKI	LERC	K DANAI	NAG 3-1458	5106
46	UNIV OF MASS-AMHERST	D LEVINE	GSFC	C SWIFT	NAS 5-31757	5125
46	WORCESTER POLY INST	D M STOAKLEY	LARC	C A BROWN	NAG 1-1476	5147
46	WORCESTER POLY INST	J A TANNER	LARC	C A BROWN	NAG 1-1606	5148
46	WORCESTER POLY INST	H D ROSS	LERC	V MOTEVALLI	NCC 3-312	5152
46	WORCESTER POLY INST	F C OWENS	HQ	A ALEXANDROU	NGT 00-050-773	5153
46	WORCESTER POLY INST	E PRIOR	LARC	C A BROWN	NGT 00-051-107	5155
46	MICHIGAN STATE UNIV	A TESSLER	LARC	R C AVERILL	NAG 1-1591	5164
46	MICHIGAN STATE UNIV	K Q ZAMAN	LERC	J F FOSS	NAG 3-1459	5167
46	MICHIGAN STATE UNIV	H D ROSS	LERC	I S WICHMAN	NAG 3-1626	5168
46	MICHIGAN TECH UNIV	F C OWENS	HQ	I MISKIOGLU	NGT 00-050-650	5191
46	UNIV MICH-ANN ARBOR	W E HOWELL	LARC	R D ERVIN	NAG 1-1410	5202
46	UNIV MICH-ANN ARBOR	G L STEFKO	LERC	C PIERRE	NAG 3-1163	5217
46	UNIV MICH-ANN ARBOR	J A PLATT	LERC	H MERTE	NAG 3-1310	5219
46	UNIV MICH-ANN ARBOR	D A JACQMIN	LERC	G TRYGGVASON	NAG 3-1317	5220
46	UNIV MICH-ANN ARBOR	F P CHIARAMONTE	LERC	H MERTE	NAS 3-25812	5299
46	UNIV MICH-ANN ARBOR	F C OWENS	HQ	T KAMMASH	NGT 00-050-645	5330
46	UNIV MICH-ANN ARBOR	J K ALEXANDER	HQ	H MERTE	NGT 00-050-928	5333
46	UNIV MICH-ANN ARBOR	D A HOLLAND	HQ	G TRYGGVASON	NGT 00-051-070	5337
46	WAYNE STATE UNIV	P S GREENBERG	LERC	J C KU	NAG 3-1265	5353
46	WESTERN MICHIGAN U	G C FRALICK	LERC	C S CHO	NAG 3-1669	5360
46	WESTERN MICHIGAN U	R K BOGUE	ARC	A W HOADLEY	NCC 2-493	5362
46	U MINN-MNPLS-ST PAUL	F F SIMON	LERC	T W SIMON	NAG 3-1249	5377
46	U MINN-MNPLS-ST PAUL	C J SARMIENTO	LERC	J V HEBERLEIN	NAG 3-1332	5378
46	U MINN-MNPLS-ST PAUL	F C OWENS	HQ	E P FENDER	NGT 00-050-830	5426
46	MISSISSIPPI STATE U	F MONTEGANI	LERC	R A ALTENKIRCH	NGT 00-050-950	5459
46	MISSISSIPPI STATE U	D K RUSSELL	HQ	D MARCUM	NGT 00-070-367	5460
46	UNIV MISS-UNIVERSITY	M BETHEA	LERC	S SINHA	NAG 3-1642	5468
46	WASHINGTON UNIVERSTY	J J MCMAHON	JSC	B SZABO	NAG 9-622	5517
46	MONTANA STATE UNIV	D REDA	ARC	A DEMETRIADES	NCA 2-659	5564
46	PRINCETON UNIVERSITY	D P STOCKER	LERC	C K LAW	NAG 3-1182	5724
46	PRINCETON UNIVERSITY	K J WEILAND	LERC	P D RONNEY	NAG 3-1242	5726
46	RUTGERS ST U-PISCTWY	R L THOMPSON	LERC	A ZEBIB	NAG 3-1453	5804
46	RUTGERS ST U-PISCTWY	F C OWENS	HQ	T WEI	NGT 00-050-707	5811
46	NEW MEX ST U-LAS CR	H ASKHENAS	JPL	R D COLBAUGH	NGT 00-070-288	5863
46	UNIV OF NEW MEXICO	A J JUHASZ	LERC	M ELGENK	NAG 3-941	5869
46	CITY U OF NY CTY COL	F M SULZMAN	HQ	S COWIN	NAGW 3860	5904
46	CLARKSON UNIVERSITY	F C OWENS	HQ	M GLAUSER	NGT 00-050-839	5926
46	CLARKSON UNIVERSITY	B SWINFORD	MSFC	G AHMADI	NGT 00-051-130	5927
46	CLARKSON UNIVERSITY	R WHITE	HQ	S P LIN	NGT 00-051-142	5928
46	CLARKSON UNIVERSITY	G A LESANE	HQ	F M CARLSON	NGT 00-051-354	5931

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
46	CLARKSON UNIVERSITY	G A LESANE	HQ	F M CARLSON	NGT 00-051-362	5932
46	CORNELL UNIVERSITY	J C NEWMAN	LARC	A R INGRAFFEA	NAG 1-1184	6009
46	CORNELL UNIVERSITY	J C NEWMAN	LARC	A R INGRAFFEA	NAG 1-1311	6010
46	CORNELL UNIVERSITY	J B HAGGARD	LERC	C T AVEDISIAN	NAG 3-987	6024
46	CORNELL UNIVERSITY	J K ALEXANDER	HQ	C T AVEDISIAN	NGT 00-050-912	6108
46	RENSSELAER POLY-NY	J T WANG	LERC	J FISH	NAG 1-1356	6151
46	RENSSELAER POLY-NY	J A PLATT	LERC	P C WAYNER	NAG 3-1399	6159
46	STATE U NY-BINGHAMTN	D E BREWE	LERC	D C SUN	NAG 3-1316	6222
46	STATE UNIV NY-BUFFAL	J P DRUMMOND	LARC	P GIBI	NAG 1-1122	6227
46	STATE UNIV NY-BUFFAL	B S SINGH	LERC	J TSAMOPOULOS	NAG 3-1620	6234
46	STATE UNIV NY-BUFFAL	D K RUSSELL	HQ	D J MOOK	NGT 00-070-333	6245
46	SYRACUSE UNIVERSITY	J E O'BRIEN	LERC	J E LEGRAFF	NAG 3-621	6299
46	SYRACUSE UNIVERSITY	E J PRIOR	LARC	E F SPINA	NGT 00-051-171	6308
46	DUKE UNIVERSITY	E PRIOR	LARC	L N VIRGIN	NGT 00-050-989	6342
46	DUKE UNIVERSITY	E PRIOR	LARC	D B BLISS	NGT 00-051-105	6343
46	DUKE UNIVERSITY	M MOORE		D B BLISS	NGT 00-051-310	6344
46	NO CAR A&T STATE U	R D VANNUCCI	LERC	V S AVVA	NAG 3-1452	6366
46	NO CAR A&T STATE U	F C OWENS	HQ	D DUNN	NGT 00-050-841	6370
46	UNIV N CAR-CHARLOTTE	M S JASTER	GSFC	P H DEHOFF	NAG 5-2038	6450
46	UNIV OF NORTH DAKOTA	R F HANDSCHUH	LERC	G D BIBEL	NAG 3-1476	6459
46	CASE WESTERN RESERVE	C H LIEBERT	LERC	A DYBBS	NAG 3-686	6469
46	CASE WESTERN RESERVE	R J CAPALDI	LERC	M L ADAMS	NAG 3-980	6476
46	CASE WESTERN RESERVE	H D ROSS	LERC	J S TIEN	NAG 3-1212	6486
46	CASE WESTERN RESERVE	G C FRALICK	LERC	M TABIB-AZAR	NAG 3-1438	6495
46	CASE WESTERN RESERVE	S V PEPPER	LERC	J M PRAHL	NCC 3-30	6512
46	CASE WESTERN RESERVE	R W VERNON	LERC	Y KAMOTANI	NCC 3-140	6522
46	CASE WESTERN RESERVE	H D ROSS	LERC	J S TIEN	NCC 3-206	6528
46	CASE WESTERN RESERVE	C LAWRENCE	LERC	W NEWMAN	NCC 3-278	6541
46	CASE WESTERN RESERVE	B M STEINETZ	LERC	J PRAHL	NCC 3-280	6542
46	CASE WESTERN RESERVE	J I TELESMA	LERC	R L MULLEN	NCC 3-331	6551
46	CASE WESTERN RESERVE	H D ROSS	LERC	J S TIEN	NCC 3-337	6552
46	CASE WESTERN RESERVE	F C OWENS	HQ	R D QUINN	NGT 00-050-588	6557
46	CASE WESTERN RESERVE	F C OWENS	HQ	J S TIEN	NGT 00-050-862	6559
46	CASE WESTERN RESERVE	F MONTEGANI	LERC	F E MCCAUGHAN	NGT 00-050-948	6561
46	CASE WESTERN RESERVE	D A HOLLAND	HQ	J S TIEN	NGT 00-051-087	6563
46	CASE WESTERN RESERVE	G LESANE	HQ	F E MCCAUGHAN	NGT 00-051-143	6564
46	CASE WESTERN RESERVE	F MONTEGANI	LERC	V KAMOTANI	NGT 00-051-168	6565
46	CASE WESTERN RESERVE	B SWINFORD	MSFC	R D QUINN	NGT 00-051-194	6566
46	CLEVELAND STATE UNIV	J M MANDERSCHIED	LERC	A PINTZ	NAG 3-879	6580
46	CLEVELAND STATE UNIV	T L KRANTZ	LERC	M RASHIDI	NAG 3-1191	6584
46	CLEVELAND STATE UNIV	W R JONES JR.	LERC	D J ANTHAN	NCC 3-336	6630
46	LORAIN CNTY COM COL	T K GLASGOW	LERC	J TOMSIC	NCC 3-226	6654
46	OHIO STATE UNIV	K Q ZAMAN	LERC	M SAMIMY	NAG 3-764	6663
46	OHIO STATE UNIV	F MONTEGANI	LERC	M SAMIMY	NGT 00-050-945	6725
46	OHIO STATE UNIV	F MONTEGANI	LERC	K ISHII	NGT 00-051-193	6727
46	OHIO STATE UNIV	F MONTEGANI	LERC	R SINGH	NGT 00-051-237	6728
46	OHIO STATE UNIV	D K RUSSELL	HQ	S KORPELA	NGT 00-070-349	6731
46	OHIO UNIVERSITY	T H FOX	MSFC	R D IRWIN	NAG 8-1041	6736
46	UNIV OF AKRON	G BOBULA	LERC	M J BRAUN	NAG 3-969	6745
46	UNIV OF AKRON	H H COE	LERC	M SAVAGE	NAG 3-1047	6746
46	UNIV OF AKRON	A D LIANG	LERC	M J BRAUN	NAG 3-1361	6753
46	UNIV OF AKRON	J F WALKER	LERC	M J BRAUN	NAG 3-1366	6754
46	UNIV OF AKRON	J J ZAKRAJSEK	LERC	F K CHOY	NAG 3-1376	6755
46	UNIV OF AKRON	B B CHOI	LERC	Y J LIN	NAG 3-1444	6756
46	UNIV OF AKRON	B B CHOI	LERC	Y J LIN	NAG 3-1544	6761
46	UNIV OF AKRON	J F WALKER	LERC	M J BRAUN	NAG 3-1547	6762
46	UNIV OF AKRON	S A HIPPENSTEELE	LERC	M J BRAUN	NCC 3-161	6767
46	UNIV OF AKRON	S A HIPPENSTEELE	LERC	M J BRAUN	NCC 3-165	6769
46	UNIV OF CINCINNATI	K W BAKER	LERC	F M GERNER	NAG 3-1392	6793
46	UNIV OF DAYTON	R G FORMAN	JSC	J P GALLAGHER	NAG 9-600	6829

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
46	UNIV OF DAYTON	D A HOLLAND	HQ	K P HALLINAN	NGT 00-051-089	6832
46	UNIV OF DAYTON	F SIX	MSFC	T J KELLY	NGT 00-051-207	6833
46	UNIV OF TOLEDO	K Q ZAMAN	LERC	K J DEWITT	NAG 3-1338	6848
46	UNIV OF TOLEDO	J F WALKER	LERC	T G KEITH	NAG 3-1370	6849
46	UNIV OF TOLEDO	I WEINBERG	LERC	T G KEITH	NAG 3-1466	6852
46	UNIV OF TOLEDO	K Q ZUMAN	LERC	K DE WITT	NAG 3-1550	6854
46	UNIV OF TOLEDO	R L FUSARO	LERC	T G KEITH	NCC 3-279	6876
46	UNIV OF TOLEDO	F F SIMON	LERC	K J DEWITT	NCC 3-288	6877
46	UNIV OF TOLEDO	D E BREWE	LERC	T G KEITH	NCC 3-291	6878
46	WRIGHT STATE UNIV	D A HOPKINS	LERC	R GRANDHI	NAG 3-1489	6884
46	UNIV OKLAHOMA-NORMAN	H D ROSS	LERC	A K AGRAWAL	NAG 3-1594	6895
46	UNIV OKLAHOMA-NORMAN	K R FERNANDEZ	MSFC	P S PULAT	NAG 8-137	6900
46	UNIV OKLAHOMA-NORMAN	E PRIOR	LARC	R A KLINE	NGT 00-051-110	6907
46	CARNEGIE-MELLON UNIV	H L NGUYEN	LERC	J I RAMOS	NAG 3-1009	6980
46	CARNEGIE-MELLON UNIV	L A KIEFLING	MSFC	J H GRIFFIN	NAS 8-38348	6991
46	CARNEGIE-MELLON UNIV	W J CHYU	ARC	T SHIH	NCA 2-824	6993
46	CARNEGIE-MELLON UNIV	L S MASON	LERC	W L WHITTAKER	NCC 3-297	6998
46	DREXEL UNIVERSITY	B M STEINETZ	LERC	F K KO	NAG 3-1059	7017
46	LEHIGH UNIVERSITY	R J SKARDA	LERC	A LIKOPOULOS	NAG 3-1632	7032
46	LEHIGH UNIVERSITY	D K RUSSELL	HQ	J RICLES	NGT 00-070-346	7038
46	PENN STATE U-UNIV PK	S A HIPPENSTEELE	LERC	C CAMCI	NAG 3-989	7067
46	PENN STATE U-UNIV PK	B PALASZEWSKI	LERC	S R TURNS	NAG 3-1044	7070
46	PENN STATE U-UNIV PK	J F WALKER	LERC	M CARPINO	NAG 3-1052	7071
46	PENN STATE U-UNIV PK	C F LOROUZO	LERC	A RAY	NAG 3-1240	7075
46	PENN STATE U-UNIV PK	K Q ZAMAN	LERC	P J MORRIS	NAG 3-1492	7081
46	PENN STATE U-UNIV PK	C F LORENZO	LERC	A RAY	NAG 3-1673	7085
46	PENN STATE U-UNIV PK	P B HALL	MSFC	L CHANG	NAG 8-1067	7126
46	PENN STATE U-UNIV PK	J LANDERS	HQ	L E CROSS	NASW 4878	7167
46	PENN STATE U-UNIV PK	F C OWENS	HQ	A RAY	NGT 00-050-706	7181
46	PENN STATE U-UNIV PK	F SIX	MSFC	C L MERKLE	NGT 00-050-884	7183
46	PENN STATE U-UNIV PK	M MOORE	ARC	G S SETTLES	NGT 00-050-952	7184
46	PENN STATE U-UNIV PK	F SIX	MSFC	V YANG	NGT 00-050-953	7185
46	PENN STATE U-UNIV PK	F SIX	MSFC	V YANG	NGT 00-051-119	7190
46	PENN STATE U-UNIV PK	F SIX	MSFC	D A SANTAVICCA	NGT 00-051-165	7193
46	PENN STATE U-UNIV PK	F SIX	MSFC	R J SANTORO	NGT 00-051-203	7194
46	PENN STATE U-UNIV PK	F SIX	MSFC	R J SANFORO	NGT 00-070-257	7199
46	UNIV OF PENNSYLVANIA	F C OWENS	HQ	H H BAU	NGT 00-050-688	7213
46	UNIV OF PENNSYLVANIA	F C OWENS	HQ	R P PAUL	NGT 00-050-729	7214
46	UNIV OF PENNSYLVANIA	D K RUSSELL	HQ	V KUMAR	NGT 00-070-359	7215
46	UNIV OF PITTSBURGH	D L NG	LERC	C C HWANG	NAG 3-1439	7220
46	UNIV OF PITTSBURGH	D E BREWE	LERC	M M KHONSARI	NAG 3-1583	7222
46	BROWN UNIVERSITY	D RUSSELL	HQ	G E KARNIADAKIS	NGT 00-070-370	7309
46	CLEMSON UNIV-CLEMSON	F C OWENS	HQ	J G GOREE	NGT 00-050-715	7356
46	MEMPHIS ST UNIV	F B OSWALD	LERC	H H LIN	NAG 3-961	7401
46	MEMPHIS ST UNIV	T L HARDY	LERC	J I HOCHSTEIN	NAG 3-1292	7402
46	MEMPHIS ST UNIV	T L HARDY	LERC	J I HOCHSTEIN	NAG 3-1530	7403
46	TENNESSEE TECH U	F C OWENS	HQ	S HAN	NGT 00-050-731	7423
46	UNIV TENNESSEE-KNOXV	W W HANKINS	LARC	R V DUBEY	NAG 1-1008	7424
46	UNIV TENNESSEE-KNOXV	R H ESKRIDGE	MSFC	S M JENG	NAG 8-132	7433
46	UNIV TENNESSEE-KNOXV	K E MCCOY	MSFC	M KEYHANI	NAG 8-862	7434
46	VANDERBILT UNIVERSTY	R A MILLER	LERC	T A CRUSE	NCC 3-187	7478
46	VANDERBILT UNIVERSTY	F SIX	MSFC	E GARCIA	NGT 00-050-883	7482
46	VANDERBILT UNIVERSTY	F MONTEGANI	LERC	R PITZ	NGT 00-050-946	7483
46	VANDERBILT UNIVERSTY	F SIX	MSFC	E GARCIA	NGT 00-051-044	7484
46	VANDERBILT UNIVERSTY	F MONTEGANI	LERC	T A CRUSE	NGT 00-051-053	7485
46	LAMAR UNIVERSITY	C H LIN	JSC	W E SIMON	NAG 9-613	7499
46	LAMAR UNIVERSITY	M HOY	JSC	W E SIMON	NAG 9-620	7500
46	LAMAR UNIVERSITY	L MONFORD	JSC	V D NGUYEN	NAG 9-639	7502
46	LAMAR UNIVERSITY	M HOY	JSC	W E SIMON	NAG 9-640	7503
46	RICE UNIVERSITY	L QUIOCHO	JSC	D H JOHNSON	NAG 9-461	7539

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
46	RICE UNIVERSITY	C H LIN	JSC	E V BARRERA	NAG 9-628	7540
46	RICE UNIVERSITY	C H LIN	JSC	B RAMASWAMY	NAG 9-747	7544
46	RICE UNIVERSITY	S GOLDSSTEIN	JSC	B AAZHANG	NGT 00-051-050	7573
46	RICE UNIVERSITY	S GOLDSTEIN	JSC	A J MEADE JR	NGT 00-051-230	7576
46	RICE UNIVERSITY	D K RUSSELL	HQ	A MEADE	NGT 00-070-353	7578
46	TEXAS A&M UNIVERSITY	J R REEDER	LARC	J D WHITCOMB	NAG 1-1324	7593
46	TEXAS A&M UNIVERSITY	C E HARRIS	LARC	D H ALLEN	NAG 1-1407	7594
46	TEXAS A&M UNIVERSITY	J M HOUSNER	LARC	A KURDILA	NAG 1-1618	7597
46	TEXAS A&M UNIVERSITY	R C HENDRICKS	LERC	D W CHILDS	NAG 3-181	7598
46	TEXAS A&M UNIVERSITY	A F KASCAK	LERC	A B PALAZZOLO	NAG 3-763	7599
46	TEXAS A&M UNIVERSITY	A F KASCAK	LERC	A B PALAZZOLO	NAG 3-891	7600
46	TEXAS A&M UNIVERSITY	J F WALKER	LERC	L SAN ANDRES	NAG 3-1434	7607
46	TEXAS A&M UNIVERSITY	J K LYTIE	LERC	J A CATON	NAG 3-1512	7608
46	TEXAS A&M UNIVERSITY	A F KASCAK	LERC	A B PALAZZOLO	NAG 3-1542	7609
46	TEXAS A&M UNIVERSITY	H G GIBSON	MSFC	D CHILDS	NAG 8-294	7622
46	TEXAS A&M UNIVERSITY	J VARGAS	MSFC	A B PALAZZOLO	NAG 8-989	7625
46	TEXAS A&M UNIVERSITY	E K UNGER	JSC	G P PETERSON	NAG 9-511	7630
46	TEXAS A&M UNIVERSITY	L G MUNFORD	JSC	R C REDFIELD	NAG 9-566	7631
46	TEXAS A&M UNIVERSITY	L MONFORD	JSC	L J EVERETT	NAG 9-629	7634
46	TEXAS A&M UNIVERSITY	D A HAMILTON	JSC	S MIDTURI	NAG 9-668	7636
46	TEXAS A&M UNIVERSITY	T L PANONTIN	ARC	T L ANDERSON	NCA 2-717	7660
46	TEXAS A&M UNIVERSITY	S GOLDSTEIN	JSC	J S YAGOOBI	NGT 00-051-232	7674
46	TEXAS A&M UNIVERSITY	F MONTEGANI	LERC	M J ANDREWS	NGT 00-051-244	7675
46	TEXAS A&M UNIV SYSTM	B L COMPOLI	LERC	T M SCHOBELIRI	NAG 3-1256	7691
46	UNIV HOUSTON	P PETETE	JSC	L C WITTE	NAG 9-532	7722
46	UNIV HOUSTON	E UNGAR	JSC	L C WITTE	NAG 9-546	7724
46	UNIV HOUSTON	L OTHON	JSC	P NANUA	NAG 9-672	7734
46	UNIV HOUSTON	F C OWENS	HQ	L C WITTE	NGT 00-050-590	7748
46	UNIV HOUSTON	S GOLDSTEIN	JSC	F HUSSAIN	NGT 00-050-875	7749
46	UNIV HOUSTON	M MOORE	ARC	F HUSSAIN	NGT 00-051-022	7750
46	UNIV TEXAS-ARLINGTON	E L CHRISTENSEN	JSC	E P FAHRENTHOLD	NAG 9-586	7807
46	UNIV TEXAS-AUSTIN	J C NEWMAN JR.	LARC	M E MEAR	NAG 1-1121	7814
46	UNIV TEXAS-AUSTIN	R J NOWAK	LARC	D E WILSON	NAG 1-1364	7816
46	UNIV TEXAS-AUSTIN	J MARMOLEJO	JSC	K BALL	NAG 9-679	7859
46	UNIV TEXAS-AUSTIN	E CHRISTIANSEN	JSC	E P FAHRENTHOLD	NAG 9-744	7860
46	UNIV TEXAS-AUSTIN	M MOORE	ARC	M G PANDY	NGT 00-051-025	7923
46	UNIV TEXAS-AUSTIN	F C OWENS	HQ	D TESAR	NGT 00-070-222	7931
46	UNIV TEXAS-AUSTIN	S GOLDSTEIN	JSC	R E BARR	NGT 00-070-252	7932
46	UNIV TEXAS-EL PASO	R A ROCHA	JSC	C M FERREGUT	NAG 9-483	7961
46	UNIV TEXAS-EL PASO	F C OWENS	HQ	J C MCCLURE	NGT 00-070-215	7966
46	UNIV TEXAS-EL PASO	D K RUSSELL	HQ	C FERREGUT	NGT 00-070-354	7972
46	UNIV OF UTAH	J A HINKLEY	LERC	W D BASCOM	NAS 1-18883	8007
46	UTAH STATE UNIV	M S LAKE	LARC	S L FOLKMAN	NAS 1-19418	8033
46	COLLEGE OF WM & MARY	R S ROGOWSKI	LARC	D KISHONI	NAG 1-1574	8068
46	COLLEGE OF WM & MARY	J A TANNER	LARC	C M ANDERSON	NCC 1-40	8074
46	COLLEGE OF WM & MARY	E PRIOR	LARC	R ORWELL	NGT 00-051-008	8082
46	OLD DOMINION UNIV	J M HOUSNER	LARC	C MEI	NAG 1-1431	8152
46	OLD DOMINION UNIV	A TESSLER	LARC	N KNIGHT	NAG 1-1505	8155
46	OLD DOMINION UNIV	M J WALSH	LARC	T AMER	NAG 1-1603	8165
46	OLD DOMINION UNIV	F C OWENS	HQ	G V SELBY	NGT 00-050-544	8182
46	OLD DOMINION UNIV	F C OWENS	HQ	G V SELBY	NGT 00-050-716	8183
46	OLD DOMINION UNIV	E PRIOR	LARC	A O DEMUREH	NGT 00-050-980	8184
46	OLD DOMINION UNIV	E J PRIOR	LARC	R PROBHAKARAN	NGT 00-050-987	8186
46	OLD DOMINION UNIV	J T LYNCH	HQ	S TIWARI	NGT 00-051-164	8189
46	OLD DOMINION UNIV	L EVANS	LARC	A C TAYLOR	NGT 00-051-247	8191
46	OLD DOMINION UNIV	E J PRIOR	LARC	J HUANG	NGT 00-070-300	8197
46	UNIV OF VIRGINIA	J A TANNER	LARC	A K NOOR	NAG 1-1180	8216
46	UNIV OF VIRGINIA	G V BROWN	LERC	P E ALLAIRE	NAG 3-1334	8224
46	UNIV OF VIRGINIA	J A SALZMAN	LERC	H HAJ-HARIRI	NAG 3-1396	8227
46	UNIV OF VIRGINIA	S M ARNOLD	LERC	M J PINDER	NAS 3-26571	8261

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
46	UNIV OF VIRGINIA	F C OWENS	HQ	G LAUFER	NGT 00-050-714	8274
46	UNIV OF VIRGINIA	F MONTEGANI	LERC	C R KNOSPE	NGT 00-050-941	8285
46	UNIV OF VIRGINIA	F MONTEGANI	LERC	H HAJ-HARIRI	NGT 00-051-243	8295
46	UNIV OF VIRGINIA	J T LYNCH	LARC	H HAJ-HARIRI	NGT 00-070-294	8304
46	VIRGINIA POLY INST	C C POE	LARC	K L REIFSNIDER	NAG 1-1282	8329
46	VIRGINIA POLY INST	C J CAMARDA	LARC	E P SCOTT	NAG 1-1507	8346
46	VIRGINIA POLY INST	C E HARRIS	LARC	C W SMITH	NAG 1-1622	8355
46	VIRGINIA POLY INST	G A BOBULA	LERC	W F O'BRIEN	NAG 3-1266	8360
46	VIRGINIA POLY INST	S M GENG	LERC	A A KORNHAUSER	NAG 3-1285	8361
46	VIRGINIA POLY INST	F C OWENS	HQ	R G KIRK	NGT 00-050-565	8382
46	VIRGINIA POLY INST	E PRIOR	LARC	J R MAHN	NGT 00-051-108	8386
46	VIRGINIA POLY INST	E PRIOR	LARC	D A DILLARD	NGT 00-051-116	8387
46	VIRGINIA POLY INST	L EVANS	LARC	E P SCOTT	NGT 00-051-249	8390
46	VIRGINIA POLY INST	E J PRIOR	LARC	U VANDSBORGER	NGT 00-070-269	8392
46	VIRGINIA POLY INST	E PRIOR	LARC	L A ROC	NGT 00-070-298	8394
46	VIRGINIA POLY INST	D K RUSSELL	HQ	W NG	NGT 00-070-395	8397
46	VIRGINIA POLY INST	R L YANG	LARC	C R FULLER	NGT 00-070-399	8398
46	UNIV OF WASHINGTON	J C NEWMAN JR.	LARC	I M FYFE	NAG 1-1586	8425
46	UNIV OF WASHINGTON	G C MISENER	HQ	B HANNAFORD	NASW 4914	8516
46	WASHINGTON ST UNIV	F P CHIARAMONTE	LERC	J N CHUNG	NAG 3-1387	8566
46	WASHINGTON ST UNIV	J ALEXANDER	HQ	J N CHONG	NGT 00-050-904	8576
46	WASHINGTON ST UNIV	J T LYNCH	HQ	C PEZESKI	NGT 00-051-027	8577
46	WEST VIRGINIA UNIV	F C OWENS	HQ	S DWIVEDI	NGT 00-050-687	8595
46	WEST VIRGINIA UNIV	F C OWENS	HQ	S N DWIVEDI	NGT 00-050-697	8596
46	WEST VIRGINIA UNIV	F C OWENS	HQ	S N DWIVEDI	NGT 00-050-752	8597
46	WEST VIRGINIA UNIV	B MARTIN	KSC	S N DWIVEDI	NGT 00-051-098	8598
46	WEST VIRGINIA UNIV	F SIX	MSFC	D LYONS	NGT 00-051-200	8599
46	WEST VIRGINIA UNIV	F SIX	MSFC	S N DWIVEDI	NGT 00-070-255	8601
46	UNIV WISC-MILWAUKEE	J A PLATT	LERC	S H CHAN	NAG 3-1381	8760
46	UNIV WISC-MILWAUKEE	E K UNGAR	JSC	S H CHAN	NAG 9-525	8761
46	U PUERTO RICO-MAYAGZ	L G HORTA	LARC	L SUAREZ	NAG 1-1496	8786
46	UNIV OF WALES	J H STARNES	LARC	F W WILLIAMS	NCCW 2	8831
47	ALABAMA A&M UNIV	T GLASGOW	LERC	R B LAL	NAG 3-1429	1001
47	AUBURN UNIV-AUBURN	F SIX	MSFC	B Z JANG	NGT 00-051-043	1040
47	TUSKEGEE UNIVERSITY	J L RANDALL	MSFC	S JEGLANI	NAG 8-131	1059
47	UNIV ALA-BIRMINGHAM	F SIX	MSFC	B ANDREWS	NGT 00-050-877	1079
47	UNIV ALA-BIRMINGHAM	D A HOLLAND	HQ	R ANDREWS	NGT 00-051-080	1082
47	UNIV ALA-HUNTSVILLE	J L JONES	LARC	J GREGORY	NAG 1-1228	1083
47	UNIV ALA-HUNTSVILLE	F W LESLIE	MSFC	R J HUNG	NAG 8-129	1097
47	UNIV ALA-HUNTSVILLE	R P WHITTEN	HQ	G R KARR	NAGW 812	1128
47	UNIV ALA-HUNTSVILLE	M B ROBINSON	MSFC	G WORKMAN	NCC 8-19	1163
47	UNIV ALA-TUSCALOOSA	F E LEDBETTER III	MSFC	A L HIGHSMITH	NCC 8-23	1212
47	UNIV ALA-TUSCALOOSA	P A CURRERERI	MSFC	D M STEFANESCU	NCC 8-57	1214
47	UNIV ALA-TUSCALOOSA	D K RUSSELL	HQ	R G BATSON	NGT 00-070-303	1217
47	ARIZONA STATE UNIV	J K ALEXANDER	HQ	G B RAUPP	NAGW 1654	1301
47	UNIV OF ARIZONA	T K GLASGOW	LERC	C F CHEN	NAG 3-1268	1365
47	UNIV OF ARIZONA	A CHAIT	LERC	D R POIRIER	NAG 3-1446	1369
47	UNIV OF ARIZONA	M P VOLZ	MSFC	K A MATTHEWS	NAG 8-944	1402
47	UNIV OF ARIZONA	P H RHODES	MSFC	J C BAYGENTS	NAG 8-948	1403
47	UNIV OF ARIZONA	F C OWENS	HQ	B FABES	NGT 00-050-737	1543
47	CALIF INST OF TECH	I D BROWNE	JSC	D S BURNETT	NAG 9-94	1623
47	CALIF INST OF TECH	P ROGERS	HQ	E STOLPER	NAGW 4026	1684
47	SAN JOSE STATE UNIV	D B LEISER	ARC	G SELVADURAY	NAG 2-848	1806
47	SAN JOSE STATE UNIV	S R RICCIETIELLO	ARC	R N ANDERSON	NCC 2-3	1831
47	SAN JOSE STATE UNIV	S R RICCIETIELLO	ARC	G SELVADURAY	NCC 2-195	1833
47	UNIV CALIF-BERKELEY	T L PANONTIN	ARC	R O RITCHIE	NAG 2-917	2057
47	UNIV CALIF-DAVIS	D CAGLIOSTRO	ARC	Z MUNIR	NCC 2-5090	2294
47	UNIV CALIF-IRVINE	W D BREWER	LARC	E J LAVERNIA	NAG 1-1619	2307
47	UNIV CALIF-L ANGELES	R HOLANDA	LERC	R F BUNSHAH	NAG 3-451	2356
47	UNIV CALIF-L ANGELES	R D NORBE	LERC	A J ARDELL	NAG 3-1325	2358

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
47	UNIV CALIF-L ANGELES	J GLASGOW	LERC	D DURIAN	NAG 3-1419	2359
47	UNIV CALIF-S BARBARA	D J RASKY	ARC	F MILESTEIN	NAG 2-930	2631
47	UNIV CALIF-S BARBARA	H G NELSON	ARC	M R SHANABARGER	NCC 2-63	2661
47	UNIV OF SOUTHERN CAL	A CHAIT	LERC	E MEIBURG	NAG 3-1619	2716
47	UNIV OF SOUTHERN CAL	A CHAIT	LERC	T MAXWORTHY	NAG 3-1621	2717
47	COLORADO SCH OF MINE	R A OUTLAW	LARC	M E EBERHART	NAG 1-1475	2759
47	COLORADO SCH OF MINE	T K GLASGOW	LERC	D READY	NAG 3-1409	2761
47	COLORADO SCH OF MINE	T K GLASGOW	LERC	J J MOORE	NCC 3-215	2763
47	COLORADO SCH OF MINE	E S NELSON	LERC	J J MOORE	NCC 3-289	2764
47	UNIV COLORADO-BOLDR	T K GLASGOW	LERC	W B KRANTZ	NAG 3-1278	2836
47	UNIV COLORADO-BOLDR	J P DOWNEY	MSFC	W B KRANTZ	NAG 8-1062	2926
47	UNIV COLORADO-BOLDR	G E HALL	MSFC	S STURE	NAS 8-38779	3036
47	UNIV COLORADO-BOLDR	F P CHIARAMONTE	LERC	J KOSTER	NCC 3-210	3048
47	UNIV COLORADO-BOLDR	H C DEGROH	LERC	P D WEIDMAN	NCC 3-272	3049
47	UNIV OF DENVER	W H PROSSER	LARC	M R GORMAN	NAG 1-1450	3120
47	UNIV OF CONNECTICUT	J C NEWMAN	LARC	A J MCEVILY	NAG 1-1382	3139
47	UNIV OF CONNECTICUT	J P BARRENGER	LERC	E JORDAN	NAS 3-26619	3144
47	YALE UNIVERSITY	D REISS	MSFC	R E APFEL	NAG 8-947	3161
47	UNIV OF DELAWARE	W C JACKSON	LARC	T CHOU	NAG 1-1383	3181
47	FLORIDA ATLANTIC U	A CHAIT	LERC	C T TSAI	NAG 3-1314	3307
47	FLORIDA ATLANTIC U	R V MINER	LERC	S M LIPKA	NAG 3-1435	3309
47	FLORIDA STATE UNIV	T K GLASGOW	LERC	J VINALS	NAG 3-1284	3332
47	UNIV OF CENTRAL FLA	J C BARNES	LARC	B CHAI	NAG 1-1502	3370
47	UNIV OF CENTRAL FLA	R LEE	KSC	D V DESAI	NAG10-121	3381
47	UNIV OF FLORIDA	W C JACKSON	LARC	B V SANKAR	NAG 1-1226	3398
47	UNIV OF FLORIDA	G J SANTORO	LERC	G J ABBACHIAN	NAG 3-1096	3404
47	UNIV OF FLORIDA	L R PURVES	GSFC	T J ANDERSON	NAG 5-2614	3410
47	UNIV OF FLORIDA	M F VOLZ	MSFC	M J KAUFMAN	NAG 8-946	3415
47	UNIV OF FLORIDA	D A WATRING	MSFC	R NARAYANAN	NCC 8-20	3442
47	UNIV OF FLORIDA	D K RUSSELL	HQ	M J KAUFMAN	NGT 00-070-282	3452
47	GEORGIA INST OF TECH	T K O'BRIEN	LARC	L W REHFELD	NAG 1-637	3514
47	GEORGIA INST OF TECH	R S PIASCIK	LARC	A SAXENA	NAG 1-1582	3528
47	GEORGIA INST OF TECH	G MACRAE	LERC	W OHLINGER	NAG 3-1239	3541
47	GEORGIA INST OF TECH	A VARY	LERC	R A GERHARDT	NAG 3-1559	3544
47	GEORGIA INST OF TECH	M D BETHEA	LERC	A M GOKHALE	NAG 3-1651	3547
47	GEORGIA INST OF TECH	E G WINTUCKY	LERC	D N HILL	NAG 3-1665	3548
47	GEORGIA INST OF TECH	C D WILSON	MSFC	H A ERNST	NAG 8-243	3555
47	GEORGIA INST OF TECH	F E LEDBETTER	MSFC	H G PARIS	NAG 8-1016	3557
47	GEORGIA INST OF TECH	F C OWENS	HQ	J D MUZZY	NGT 00-050-705	3587
47	GEORGIA INST OF TECH	E PRIOR	LARC	A SAXENA	NGT 00-051-112	3596
47	GEORGIA INST OF TECH	F MONTEGANI	LERC	D N HILL	NGT 00-051-192	3600
47	NORTHWESTERN UNIV	A CHAIT	LERC	S H DAVIS	NAG 3-747	3782
47	NORTHWESTERN UNIV	A CHAIT	LERC	M G WORSTER	NAG 3-1405	3783
47	NORTHWESTERN UNIV	T K GLASGOW	LERC	P W VORHEES	NAG 3-1417	3784
47	NORTHWESTERN UNIV	D A FRAZIER	MSFC	P W VOORHEES	NAG 8-769	3798
47	NORTHWESTERN UNIV	J P DOWNEY	MSFC	J M TORKELSON	NAG 8-1061	3800
47	NORTHWESTERN UNIV	R R BOWMAN	LERC	D E BOSS	NAS 3-26810	3812
47	UNIV OF CHICAGO	J L JONES	LARC	A T TUZZOLINO	NAS 1-20251	3898
47	UNIV ILLINOIS-CHICGO	N N NEMETH	LERC	A CHUDNOVSKY	NAG 3-1034	3924
47	UNIV ILLINOIS-URBANA	H G NELSON	ARC	I M ROBERTSON	NAG 2-852	3940
47	UNIV ILLINOIS-URBANA	T K GLASGOW	LERC	A J PEARLSTEIN	NAG 3-1121	3947
47	UNIV ILLINOIS-URBANA	A CHAIT	LERC	J A DANTZIG	NAG 3-1286	3952
47	UNIV ILLINOIS-URBANA	A CHAIT	LERC	J A DANTZIG	NAG 3-1637	3957
47	UNIV ILLINOIS-URBANA	R POORMAN	MSFC	J MAZUMDER	NAG 8-934	3972
47	PURDUE UNIVERSITY	J R REAGAN	LERC	H MINDLIN	NAG 3-1629	4065
47	PURDUE UNIVERSITY	D ELLIS	LERC	R TAYLOR	NAS 3-26940	4091
47	UNIV OF NOTRE DAME	K A WHITE	LERC	A VARMA	NAG 3-1644	4126
47	UNIV OF NOTRE DAME	E C ETHRIDGE	MSFC	P J MCGINN	NAG 8-1064	4128
47	IOWA STATE UNIV	A VARY	LERC	D K HSU	NAG 3-1322	4155
47	UNIV OF IOWA	H C DEGROH	LERC	C BECKERMAN	NCC 3-290	4228

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
47	KANSAS STATE UNIV	H G MAAHS	LARC	P M SHERWOOD	NCC 1-161	4244
47	WICHITA STATE UNIV	H B DEXTER	LARC	G BRINKMAN	NCC 1-187	4280
47	SO UNIV & A&M COL-BR	G FICHTL	MSFC	R DIWAN	NAG 8-252	4349
47	TULANE UNIVERSITY	B GROSS	LERC	A A RUBENSTEIN	NAG 3-967	4359
47	JOHNS HOPKINS UNIV	S S WELCH	LARC	P R SHUSTER	NAG 1-1595	4399
47	JOHNS HOPKINS UNIV	A VARY	LERC	R E GREENE JR.	NAG 3-1431	4401
47	UNIV MARYLAND-COL PK	A D FREED	LERC	H W HASLACH	NAG 3-1321	4543
47	MASS INST OF TECH	D E BOWLES	LARC	H L MCMANUS	NAG 1-1463	4865
47	MASS INST OF TECH	H E KAUTZ	LERC	J H WILLIAMS	NAG 3-1105	4895
47	MASS INST OF TECH	I D BROWNE	JSC	R G PRINN	NAG 9-108	4966
47	MASS INST OF TECH	B CARPENTER	HQ	J SZEKELY	NGT 00-051-069	5079
47	MASS INST OF TECH	D A HOLLAND	HQ	P CEBE	NGT 00-051-136	5080
47	NORTHEASTERN UNIV	A VARY	LERC	H N HASEMI	NAG 3-1129	5094
47	NORTHEASTERN UNIV	F C OWENS	HQ	P W VOORHEES	NGT 00-050-627	5096
47	WORCESTER POLY INST	F C OWENS	HQ	R D SISSON	NGT 00-050-827	5154
47	MICHIGAN TECH UNIV	T K GLASGOW	LERC	A HELLAWELL	NAG 3-560	5179
47	MICHIGAN TECH UNIV	A CHAIT	LERC	A HELLAWELL	NAG 3-1462	5181
47	MICHIGAN TECH UNIV	T GLASGOW	LERC	A HELLAWELL	NAG 3-1659	5182
47	UNIV MICH-ANN ARBOR	W D BREWER	LARC	A GHOSH	NAG 1-1317	5200
47	UNIV MICH-ANN ARBOR	R T BHATT	LERC	J W HOLMES	NAS 3-26820	5300
47	UNIV MICH-ANN ARBOR	R T BHATT	LERC	J W HOLMES	NAS 3-27141	5301
47	UNIV MICH-ANN ARBOR	R D NOEBE	LERC	R GIBALA	NCC 3-76	5320
47	UNIV MICH-ANN ARBOR	R ROGERS	LERC	G TRYGGVASON	NCC 3-355	5322
47	UNIV MICH-ANN ARBOR	F SIX	MSFC	D C MARTIN	NGT 00-051-120	5338
47	U MINN-MNPLS-ST PAUL	I D BROWNE	JSC	A O NIER	NAG 9-110	5388
47	ST LOUIS UNIVERSITY	C DELLACORTE	LERC	P A BENOY	NCC 3-330	5479
47	UNIV MO-COLUMBIA	W M DUVAL	LERC	S K LOYALKA	NAG 3-1420	5484
47	WASHINGTON UNIVERSTY	L A TEICHMAN	LARC	E ZINNER	NAG 1-1174	5507
47	WASHINGTON UNIVERSTY	H G NELSON	ARC	S M SASTRY	NAG 2-865	5510
47	WASHINGTON UNIVERSTY	E C ETHRIDGE	MSFC	K F KELTON	NCC 8-49	5548
47	PRINCETON UNIVERSITY	T K GLASGOW	LERC	P M CHAIKIN	NAG 3-1158	5723
47	PRINCETON UNIVERSITY	M CASTRO-CEDANO	LERC	I GLASSMAN	NAG 3-1418	5727
47	PRINCETON UNIVERSITY	T K GLASGOW	LERC	P M CHAIKIN	NAG 3-1614	5729
47	NEW MEX ST U-LAS CR	A VARY	LERC	V K CHOO	NAG 3-1328	5829
47	CLARKSON UNIVERSITY	L R PURVES	GSFC	W R WILCOX	NAG 5-1809	5918
47	CLARKSON UNIVERSITY	J P DOWNEY	MSFC	L L REGEL	NAG 8-1063	5922
47	POLYTECHNIC U	E C ETHRIDGE	MSFC	S ARNOLD	NAG 8-1060	6146
47	RENSSELAER POLY-NY	A CHAIT	LERC	J D COLE	NAG 3-1413	6161
47	RENSSELAER POLY-NY	E A WINSA	LERC	M E GLICKSMAN	NAS 3-25368	6173
47	RENSSELAER POLY-NY	F MONTEGANI	LERC	M E GLICKSMAN	NGT 00-051-241	6185
47	STATE UNIV NY-ALBANY	D C GILLIES	MSFC	M DUDLEY	NAG 8-891	6206
47	STATE UNIV NY-BUFFAL	B GROSS	LERC	R C WETHERHOLD	NAG 3-862	6230
47	STATE U NY-STONY BRK	T K GLASGOW	LERC	H S DHADWAL	NCC 3-241	6284
47	NO CAR A&T STATE U	C C POE JR.	LARC	K N SHIVAKUMAR	NAG 1-1604	6363
47	NO CAR A&T STATE U	R V MINER	LERC	G J FILATOVS	NAG 3-1432	6365
47	NO CAROLINA STATE U	C C POE	LARC	C M PASTORE	NAG 1-1212	6379
47	NO CAROLINA STATE U	L A TEICHMAN	LARC	D P GRIFFIS	NAG 1-1214	6380
47	NO CAROLINA STATE U	J K ALEXANDER	HQ	K J BACHMANN	NAGW 2865	6397
47	NO DAKOTA STATE UNIV	F SIX	MSFC	P HAMMOND	NAG 8-1007	6456
47	BALDWIN-WALLACE COL	A F RATAJCZAK	LERC	J GROSE	NAG 3-1528	6463
47	CASE WESTERN RESERVE	J A POWELL	LERC	P PIROUZ	NAG 3-758	6470
47	CASE WESTERN RESERVE	B GROSS	LERC	R BALLARINI	NAG 3-856	6473
47	CASE WESTERN RESERVE	R T BHATT	LERC	D L FEKE	NAG 3-1141	6482
47	CASE WESTERN RESERVE	A CHAIT	LERC	A J DAHM	NAG 3-1412	6494
47	CASE WESTERN RESERVE	R L THOMPSON	LERC	S OSTRACH	NAG 3-1538	6500
47	CASE WESTERN RESERVE	H R GRAY	LERC	G M MICHAL	NCC 3-94	6516
47	CASE WESTERN RESERVE	S R LEVINE	LERC	W S WILLIAMS	NCC 3-139	6521
47	CASE WESTERN RESERVE	H R GRAY	LERC	G M MICHAL	NCC 3-144	6524
47	CASE WESTERN RESERVE	T K GLASGOW	LERC	J A MANN	NCC 3-166	6526
47	CASE WESTERN RESERVE	T K GLASGOW	LERC	J F WALLACE	NCC 3-170	6527

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
47	CASE WESTERN RESERVE	D R HULL	LERC	K P LAGERLOF	NCC 3-236	6529
47	CASE WESTERN RESERVE	J A DICARLO	LERC	K D LAGERLOFF	NCC 3-244	6530
47	CASE WESTERN RESERVE	T K GLASGOW	LERC	J J LEWANDOWSKI	NCC 3-250	6531
47	CASE WESTERN RESERVE	T K GLASGOW	LERC	W S WILLIAMS	NCC 3-254	6533
47	CASE WESTERN RESERVE	T K GLASGOW	LERC	J A MANN	NCC 3-266	6538
47	CASE WESTERN RESERVE	T K GLASGOW	LERC	J A MANN	NCC 3-269	6539
47	CASE WESTERN RESERVE	A CHAIT	LERC	V K PINES	NCC 3-275	6540
47	CASE WESTERN RESERVE	M D BETHEA	LERC	F I MERAT	NCC 3-292	6543
47	CASE WESTERN RESERVE	T K GLASGOW	LERC	D MATTHIESEN	NCC 3-293	6544
47	CASE WESTERN RESERVE	M V NATHAL	LERC	R M AIKEN	NCC 3-295	6546
47	CASE WESTERN RESERVE	K K DE GROH	LERC	J F WALLACE	NCC 3-296	6547
47	CASE WESTERN RESERVE	R T BHATT	LERC	D L FEKE	NCC 3-298	6548
47	CASE WESTERN RESERVE	M BETHEA	LERC	F L MERAT	NCC 3-313	6549
47	CASE WESTERN RESERVE	I L KRAINSLEY	LERC	Y WANG	NCC 3-352	6554
47	CASE WESTERN RESERVE	F C OWENS	HQ	G M MICHAL	NGT 00-050-632	6558
47	CASE WESTERN RESERVE	G A LESANE	HQ	D H MATTHIESEN	NGT 00-051-357	6567
47	CASE WESTERN RESERVE	G A LESANE	HQ	D MATTHIESEN	NGT 00-051-361	6568
47	CLEVELAND STATE UNIV	F I HURWITZ	LERC	J H HEMANN	NAG 3-749	6579
47	CLEVELAND STATE UNIV	J FERRANTE	LERC	H SCHLOSSER	NAG 3-1313	6586
47	CLEVELAND STATE UNIV	J M SAVINO	LERC	A PINTZ	NCC 3-77	6600
47	CLEVELAND STATE UNIV	J P GYEKENYESI	LERC	J H HEMANN	NCC 3-81	6601
47	CLEVELAND STATE UNIV	H R GRAY	LERC	S N TEWARI	NCC 3-119	6603
47	CLEVELAND STATE UNIV	S R LEVINE	LERC	J H HEMANN	NCC 3-138	6605
47	CLEVELAND STATE UNIV	M D BETHEA	LERC	S N TEWARI	NCC 3-142	6606
47	CLEVELAND STATE UNIV	C E LOWELL	LERC	S N TEWARI	NCC 3-190	6610
47	CLEVELAND STATE UNIV	L A GREENBAUER-SENG	LERC	S N TEWARI	NCC 3-205	6614
47	CLEVELAND STATE UNIV	D R HULL	LERC	S N TEWARI	NCC 3-228	6615
47	CLEVELAND STATE UNIV	T K GLASGOW	LERC	S N TEWARI	NCC 3-242	6616
47	CLEVELAND STATE UNIV	L A GREENBAUER-SENG	LERC	S N TEWARI	NCC 3-285	6618
47	CLEVELAND STATE UNIV	R R BOWMAN	LERC	S N TEWARI	NCC 3-287	6619
47	CLEVELAND STATE UNIV	A CHAIT	LERC	S TEWARI	NCC 3-299	6620
47	CLEVELAND STATE UNIV	G BAAKLINI	LERC	J HEMANN	NCC 3-303	6622
47	CLEVELAND STATE UNIV	G Y BAAKLINI	LERC	J HEMANN	NCC 3-304	6623
47	CLEVELAND STATE UNIV	N NEMETH	LERC	S DUFFY	NCC 3-305	6624
47	CLEVELAND STATE UNIV	N NEMETH	LERC	J HEMANN	NCC 3-306	6625
47	CLEVELAND STATE UNIV	N NEMETH	LERC	S DUFFY	NCC 3-310	6626
47	CLEVELAND STATE UNIV	A VARY	LERC	J HEMANN	NCC 3-316	6627
47	CLEVELAND STATE UNIV	N NEMETH	LERC	J HEMANN	NCC 3-328	6628
47	CLEVELAND STATE UNIV	G Y BAAKLINI	LERC	J H HEMANN	NCC 3-334	6629
47	KENT STATE UNIV-KENT	N D PILTCH	LERC	C VARGAS-ABURTO	NCC 3-189	6647
47	OHIO STATE UNIV	W D BREWER	LARC	G S DAEHN	NAG 1-1357	6659
47	OHIO STATE UNIV	G Y BAAKLINI	LERC	S I ROKHLIN	NAG 3-1220	6669
47	OHIO STATE UNIV	A CHAIT	LERC	S A KORPELA	NAG 3-1308	6670
47	OHIO STATE UNIV	A CHAIT	LERC	S TANVEER	NAG 3-1415	6673
47	OHIO STATE UNIV	T K GLASGOW	LERC	P K DUTTA	NAG 3-1416	6674
47	OHIO STATE UNIV	T K GLASGOW	LERC	D G STROUD	NAG 3-1437	6675
47	OHIO STATE UNIV	A CHAIT	LERC	P K GUPTA	NAG 3-1602	6683
47	OHIO STATE UNIV	C RUSSELL	MSFC	V SABRAMANIAM	NAS 8-39930	6717
47	OHIO STATE UNIV	N P BANSAL	LERC	C H DRUMMOND	NCC 3-234	6721
47	UNIV OF AKRON	K J BOWLES	LERC	R K EBY	NAG 3-1289	6750
47	UNIV OF AKRON	G D ROBERTS	LERC	E A MEINECKE	NAG 3-1305	6751
47	UNIV OF AKRON	G D ROBERTS	LERC	F N KELLEY	NAG 3-1498	6760
47	UNIV OF AKRON	G D ROBERTS	LERC	W K BINIERDA	NAG 3-1553	6764
47	UNIV OF AKRON	C H CHUANG	LERC	F W HARRIS	NAS 3-27318	6765
47	UNIV OF AKRON	G P ROBERTS	LERC	G W YOUNG	NCC 3-104	6766
47	UNIV OF AKRON	G D ROBERTS	LERC	W K BINIENDA	NCC 3-188	6771
47	UNIV OF AKRON	B N ROSENTHAL	LERC	C BATUR	NCC 3-209	6772
47	UNIV OF AKRON	T K GLASGOW	LERC	C BATUR	NCC 3-211	6773
47	UNIV OF AKRON	M B MEYER	LERC	C BATUR	NCC 3-231	6775
47	UNIV OF AKRON	T K GLASGOW	LERC	H M CHEUNG	NCC 3-240	6776

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
47	UNIV OF AKRON	L A GREENBUER-SENG	LERC	H M CHEUNG	NCC 3-314	6778
47	UNIV OF AKRON	F C OWENS	HQ	R K EBY	NGT 00-070-235	6781
47	UNIV OF CINCINNATI	R V MINER	LERC	V K VASUDEVAN	NAG 3-1596	6798
47	UNIV OF CINCINNATI	F C OWENS	HQ	N GAYARAMAN	NGT 00-050-712	6819
47	UNIV OF CINCINNATI	F MONTEGANI	LERC	R Y LIN	NGT 00-050-982	6820
47	UNIV OF DAYTON	I J TELESMA	LERC	G HARTMAN	NAS 3-27323	6830
47	UNIV OF TOLEDO	A VARRY	LERC	K CLOS	NAG 3-1422	6850
47	WRIGHT STATE UNIV	N S JACOBSON	LERC	G M MEHROTRA	NAG 3-1233	6883
47	UNIV OF TULSA	W J BRINDUEY	LERC	E F RYBICKI	NCC 3-338	6910
47	CARNEGIE-MELLON UNIV	H G NELSON	ARC	A W THOMPSON	NAG 2-850	6978
47	CARNEGIE-MELLON UNIV	H G NELSON	ARC	A W THOMPSON	NCA 2-602	6992
47	CARNEGIE-MELLON UNIV	F C OWENS	HQ	A W THOMPSON	NGT 00-050-823	7000
47	DREXEL UNIVERSITY	D J ROTH	LERC	M A EL-SHERIF	NAG 3-1347	7019
47	LEHIGH UNIVERSITY	I D BROWNE	JSC	J I GOLDSTEIN	NAG 9-45	7035
47	PENN STATE U-UNIV PK	W L VAUGHN	LARC	R ROY	NAG 1-1377	7051
47	PENN STATE U-UNIV PK	C L LACH	LARC	R P MARTUKANITZ	NAG 1-1554	7059
47	PENN STATE U-UNIV PK	D L NG	LERC	T R SHROUT	NAG 3-1225	7074
47	PENN STATE U-UNIV PK	R L DEWITT	LERC	R M GERMAN	NAG 3-1287	7076
47	PENN STATE U-UNIV PK	A VARY	LERC	J L ROSE	NAG 3-1365	7079
47	PENN STATE U-UNIV PK	B F QUIGLEY	HQ	R E TRESSLER	NAGW 1381	7130
47	PENN STATE U-UNIV PK	F SIX	MSFC	P R HOWELL	NGT 00-051-204	7195
47	BROWN UNIVERSITY	I D BROWNE	JSC	P C HESS	NAG 9-109	7266
47	CLEMSON UNIV-CLEMSON	S A WISE	LARC	G H HAERTLING	NAG 1-1108	7335
47	CLEMSON UNIV-CLEMSON	W E MILLER	LARC	G H HAERTLING	NAG 1-1301	7337
47	CLEMSON UNIV-CLEMSON	G L FARLEY	LARC	J M KENNEDY	NCC 1-127	7352
47	UNIV SO CAROLINA-COL	C E HARRIS	LARC	M SUTTON	NAG 1-1489	7368
47	FISK UNIVERSITY	J DOWNEY	MSFC	D O HENDERSON	NAG 8-1066	7397
47	TENNESSEE STATE UNIV	F E ROBERTS	MSFC	D K CHAUDHUN	NAG 8-1018	7418
47	UNIV TENNESSEE-KNOXV	W S JOHNSON	LARC	M S MADHUKAR	NAG 1-1566	7426
47	UNIV TENNESSEE-KNOXV	M V NATHAL	LERC	B F OLIVER	NAG 3-876	7429
47	UNIV TENNESSEE-KNOXV	K J BOWLES	LERC	M S MADHUKAR	NAG 3-1480	7430
47	UNIV TENNESSEE-KNOXV	J P DOWNEY	MSFC	S D ALEXANDRATES	NAG 8-1065	7435
47	VANDERBILT UNIVERSTY	J L JONES	LARC	D L KINSER	NAG 1-1464	7455
47	VANDERBILT UNIVERSTY	D S TUCKER	MSFC	D L KINSER	NAG 8-156	7462
47	VANDERBILT UNIVERSTY	M B ROBINSON	MSFC	R J BAYUZICK	NAG 8-765	7463
47	VANDERBILT UNIVERSTY	M B ROBINSON	MSFC	R J BAYVZICK	NAG 8-1087	7466
47	VANDERBILT UNIVERSTY	G LESANE	HQ	R J BAYUZICK	NGT 00-051-267	7486
47	VANDERBILT UNIVERSTY	G A LESANE	HQ	R J BAYUZICK	NGT 00-051-356	7487
47	LAMAR UNIVERSITY	G ECORD	JSC	V NGUYEN	NAG 9-698	7508
47	RICE UNIVERSITY	W L CASTNER	JSC	F R BROTZEN	NAG 9-447	7537
47	RICE UNIVERSITY	E L CHRISTIANSEN	JSC	Y C ANGEL	NAG 9-457	7538
47	TEXAS A&M UNIVERSITY	J L JONES	LARC	T STRGANAC	NAG 1-1297	7592
47	TEXAS A&M UNIVERSITY	C LAWRENCE	LERC	A B PALLAZZOLO	NAG 3-1556	7610
47	TEXAS A&M UNIVERSITY	I S SMITH	GSFC	T W STRGANAC	NAG 5-673	7613
47	TEXAS A&M UNIVERSITY	W L CASTNER	JSC	J HERRERA	NAG 9-395	7627
47	TEXAS SOUTHERN UNIV	D HENNINGER	JSC	R WILSON	NAG 9-423	7698
47	UNIV TEXAS-AUSTIN	T L GROBSTEIN	LERC	J K TIEN	NAG 3-1085	7828
47	UNIV TEXAS-AUSTIN	E L CHRISTIANSEN	JSC	C H YEW	NAG 9-114	7846
47	UNIV TEXAS-AUSTIN	E CHRISTIANSEN	JSC	C YEW	NAG 9-661	7853
47	UNIV TEXAS-EL PASO	A C NUNES	MSFC	J C MCCLURE	NAG 8-1056	7957
47	UNIV TEXAS-EL PASO	S L KOONTZ	JSC	L E MURR	NAG 9-481	7959
47	UNIV TEXAS-EL PASO	A C NUNES	MSFC	J C MCCLURE	NAS 8-39602	7965
47	UNIV TEXAS-EL PASO	F C OWENS	HQ	J MCCLURE	NGT 00-070-245	7967
47	UNIV TEXAS-EL PASO	F C OWENS	HQ	J C MCCLURE	NGT 00-070-246	7968
47	UNIV TEXAS-EL PASO	F SIX	MSFC	J C MCCLURE	NGT 00-070-297	7969
47	UNIV TEXAS-EL PASO	D K RUSSELL	HQ	L E MURR	NGT 00-070-343	7970
47	UNIV TEXAS-S ANTONIO	H G NELSON	ARC	H F BRINSON	NCC 2-724	7981
47	UNIV OF UTAH	J R REEDER	LARC	S R SWANSON	NAG 1-1379	7994
47	CHRISTPHR NEWPORT U	F ALLAMBY	LARC	R SELIM	NAG 1-1242	8052
47	GEORGE MASON UNIV	L R PURVES	GSFC	E D COLE	NAG 5-1495	8094

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
47	GEORGE MASON UNIV	L R PURVES	GSFC	E D COLE	NAG 5-2320	8097
47	LONGWOOD COLLEGE	A L FRIPP	LARC	P G BARBER	NAG 1-627	8120
47	NORFOLK STATE UNIV	M A MEADOR	LERC	L MATTIX	NAG 3-1371	8127
47	OLD DOMINION UNIV	R A OUTLAW	LERC	R L ASH	NAG 1-1140	8143
47	UNIV OF VIRGINIA	D L DICUS	LARC	R P GANGLOFF	NAG 1-745	8209
47	UNIV OF VIRGINIA	R V MINER	LERC	M J PINDER	NAG 3-1319	8223
47	UNIV OF VIRGINIA	S L VENNERT	HQ	H N WADLEY	NAGW 1692	8244
47	UNIV OF VIRGINIA	T W CROOKER	HQ	W D PILKEY	NAGW 2050	8247
47	VIRGINIA POLY INST	D R TENNEY	LARC	F W STEPHENSON	NAG 1-343	8313
47	VIRGINIA POLY INST	C C POE	LARC	P IFJU	NAG 1-1429	8339
47	VIRGINIA POLY INST	S A WISE	LARC	E P SCOTT	NAG 1-1500	8345
47	VIRGINIA POLY INST	W S JOHNSON	LARC	K L REIFSNIDER	NAG 1-1608	8353
47	VIRGINIA POLY INST	G C FRALICK	LERC	S B DESU	NAG 3-1562	8365
47	VIRGINIA POLY INST	H A WILL	LERC	T E DILLER	NAG 3-1643	8366
47	VIRGINIA POLY INST	A VARY	LERC	E G HENNEKE	NAS 3-26827	8371
47	WEST VIRGINIA UNIV	C C POE	LARC	T L NORMAN	NAG 1-1381	8583
47	MARQUETTE UNIVERSITY	A F WHITAKER	MSFC	W E BROWER	NAG 8-237	8612
47	UNIV WISC-MADISON	R L THOM	MSFC	D S STONE	NAG 8-153	8670
47	UNIV WISC-MADISON	M B ROBINSON	MSFC	J H PEREPEZKO	NAG 8-771	8671
47	UNIV WISC-MADISON	L E MOORE	MSFC	D S STONE	NAG 8-1023	8675
47	UNIV WISC-MADISON	D A HOLLAND	HQ	R F COOPER	NGT 00-051-067	8749
47	UNIV WISC-MADISON	D A HOLLAND	HQ	J PEREPEZKO	NGT 00-051-133	8751
47	UNIV WISC-MADISON	D HOLLAND	HQ	J H PEREPEZKO	NGT 00-051-190	8753
47	UNIV WISC-MADISON	G LESANE	HQ	J H BOOSKE	NGT 00-051-263	8755
47	UNIV WISC-MADISON	G A LESANE	HQ	D R SMITH	NGT 00-051-364	8756
47	UNIV OF WYOMING	N J JOHNSTON	LARC	D F ADAMS	NAG 1-1294	8766
49	AUBURN UNIV-AUBURN	J E HENGEL	MSFC	W A FOSTER	NAG 8-923	1024
49	AUBURN UNIV-AUBURN	F C OWENS	HQ	B Z JANG	NGT 00-050-824	1038
49	OAKWOOD COLLEGE	G H FICHTL	MSFC	H R DESSAU	NCC 8-10	1049
49	TUSKEGEE UNIVERSITY	T L HARDY	LERC	P R RAY	NAG 3-726	1055
49	UNIV ALA-HUNTSVILLE	J CARLISLE	MSFC	J O DIMMOCK	NAG 8-1028	1119
49	UNIV ALA-HUNTSVILLE	J CARLISLE	MSFC	B J SCHROER	NAG 8-1029	1120
49	UNIV ALA-HUNTSVILLE	R E DOTSON	MSFC	G R HOUGH	NCC 8-28	1166
49	UNIV ALA-HUNTSVILLE	D K RUSSELL	HQ	P FARRINGTON	NGT 00-070-368	1183
49	UNIV ALA-HUNTSVILLE	F C OWENS	HQ	L M FREEMAN	NGT 1-2099	1186
49	UNIV ALA-HUNTSVILLE	A S MCGEE	HQ	G R KARR	NGT 1-8021	1187
49	UNIV ALA-TUSCALOOSA	R A WEIR	MSFC	T HASKEW	NAG 8-240	1199
49	NORTHERN ARIZONA U	D M COOPER	ARC	S L BRINKERHOFF	NAG 2-6003	1337
49	NORTHERN ARIZONA U	Y B FREEMAN	HQ	C N HOLLAND	NGT 00-090-028	1348
49	UNIV OF ARIZONA	B F QUIGLEY	HQ	S C CROW	NAGW 1332	1423
49	CALIF INST OF TECH	A S MCGEE	HQ	C MERKEL	NGT 00-060-009	1712
49	CALIF INST OF TECH	A S MCGEE	HQ	A L ALBEE	NGT 5-3790	1718
49	CAL STATE U-FULLERTN	R L PATTERSON	LERC	R C SUICH	NAG 3-1100	1749
49	CAL STATE U-L ANGELES	B WHITE	HQ	M RANDLE	NGT 00-090-051	1756
49	CAL STATE U-L ANGELES	B WHITE	HQ	R LANDIS	NGT 00-090-064	1757
49	CAL STATE U-NRTHRDGE	M S MARGOLIS	HQ	C MORNING	NGT 00-090-032	1763
49	CAL STATE U-NRTHRDGE	B WHITE	HQ	M MACIAS	NGT 00-090-055	1764
49	D-Q UNIVERSITY	B L WHITE	HQ	A LOUFAS	NGT 00-090-054	1770
49	HARVEY MUDD COLLEGE	M L HINES	ARC	J ROSENBERG	NCC 2-5098	1776
49	SAN FRAN STATE UNIV	G M MULENBURG	ARC	P PFAELZER	NCC 2-5037	1801
49	STANFORD UNIVERSITY	A S MCGEE	HQ	D BERSHADER	NGT 5-20412	2048
49	UNIV CALIF-BERKELEY	G MEYER	ARC	S S SASTRY	NAG 2-243	2053
49	UNIV CALIF-BERKELEY	S OLSON	LERC	A C FERNANDEZ-PELLO	NAG 3-1252	2059
49	UNIV CALIF-IRVINE	H D ROSS	LERC	W A SIRIGNANO	NAG 3-627	2310
49	UNIV CALIF-IRVINE	L H LI	JSC	G L LONG	NAG 9-725	2320
49	UNIV CALIF-IRVINE	N S JACOBSON	LERC	G S SAMUELSON	NAS 3-27094	2331
49	UNIV CALIF-L ANGELES	K W ILIFF	ARC	A V BALAKRISHNAN	NCC 2-374	2471
49	UNIV CALIF-SAN DIEGO	H D ROSS	LERC	F A WILLIAMS	NAG 3-1081	2506
49	UNIV CALIF-SAN DIEGO	L D CAUDILL	HQ	P M CHAU	NASW 4507	2594
49	UNIV CALIF-SAN DIEGO	C HIX	JPL	A M SCHNEIDER	NGT 00-051-274	2610

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
49	UNIV CALIF-SAN DIEGO	D K RUSSELL	HQ	A SCHNEIDER	NGT 00-070-317	2613
49	UNIV CALIF-S CRUZ	D K RUSSELL	HQ	R HUGHEY	NGT 00-070-337	2702
49	UNIV COLORADO-BOLDR	W K BELVIN	LARC	K C PARK	NAG 1-1200	2811
49	UNIV COLORADO-BOLDR	J A SALZMAN	LERC	R H DAVIS	NAG 3-1277	2835
49	UNIV COLORADO-BOLDR	S KENT	GSFC	G BORN	NAG 5-2332	2889
49	UNIV COLORADO-BOLDR	A P BUKLEY	MSFC	M J BALAS	NAG 8-244	2920
49	UNIV COLORADO-BOLDR	A P BUKLEY	MSFC	M J BALAS	NAG 8-925	2923
49	UNIV COLORADO-BOLDR	M S HIRSCHBEIN	HQ	G W MORGANTHALER	NAGW 1388	2943
49	UNIV OF DENVER	J B MCQUILLEN	LERC	J KIM	NAG 3-1609	3123
49	UNIV STHN COLORADO	V B HOLLAND	ARC	W R DUNN	NCC 2-373	3136
49	UNIV STHN COLORADO	L W DOTY	ARC	W R DUNN	NCC 2-609	3137
49	UNIV OF CONNECTICUT	N MINNIFIELD	GSFC	C ROYCHOUDHURI	NCC 5-64	3145
49	GALLAUDET COLLEGE	M MARGOLIS	HQ	NISSEN	NGT 00-090-013	3206
49	GEORGE WASHINGTON U	R L YANG	LARC	J L WHITESIDES	NAG 1-1353	3211
49	GEORGE WASHINGTON U	W POLAND JR	GSFC	H J HELGERT	NSG-5109	3231
49	HOWARD UNIVERSITY	A GOODSON	GSFC	T L GILL	NAG 5-995	3238
49	AMERICAN UNIVERSITY	B D SEERY	GSFC	R B KAY	NAG 5-1319	3250
49	FLORIDA A&M UNIV	M S PLECITY	LERC	J L EARLY	NAG 3-1494	3295
49	FLORIDA A&M UNIV	Y B FREEMAN	HQ	W TOLIVER	NGT 00-090-015	3298
49	FLORIDA A&M UNIV	L WARREN	HQ	F S HUMPHRIES	NGT 00-090-030	3299
49	FLORIDA ATLANTIC U	J S LITT	LERC	A DUYAR	NAG 3-1198	3306
49	UNIV OF CENTRAL FLA	J KOLF	ARC	D GUCKENBERGER	NAG 2-4005	3371
49	UNIV OF CENTRAL FLA	B MARTIN	KSC	W SMART	NGT 00-051-099	3389
49	UNIV OF CENTRAL FLA	A S MCGEE	HQ	L A ANDERSON	NGT 00-060-002	3390
49	UNIV OF CENTRAL FLA	B WHITE	HQ	J SMITH	NGT 00-090-046	3391
49	UNIV OF CENTRAL FLA	B WHITE	HQ	S RICE	NGT 00-090-059	3392
49	UNIV OF CENTRAL FLA	J M MACKALL	HQ	J A SMITH	NGT 00-090-159	3395
49	UNIV OF FLORIDA	R L YANG	LARC	A JD	NAG 1-1394	3399
49	UNIV OF FLORIDA	J S CLARK	LARC	N J DIAZ	NAG 3-1293	3407
49	UNIV OF FLORIDA	F SIX	MSFC	N FITZ-COY	NAG 8-280	3414
49	UNIV OF FLORIDA	S LITTLE	MSFC	J R THORTON	NCC 8-32	3443
49	UNIV OF MIAMI	R WALES	GSFC	O BROWN	NAS 5-30694	3470
49	UNIV OF SO FLORIDA	B WHITE	HQ	R E HERRING	NAGW 3050	3485
49	UNIV OF SO FLORIDA	B WHITE	HQ	J O'SHIELDS	NGT 00-090-048	3500
49	UNIV OF SO FLORIDA	B L WHITE	HQ	J A O'SHIELDS	NGT 00-090-060	3501
49	GEORGIA INST OF TECH	H C VYKUKAL	ARC	L H OLSON	NAG 2-806	3533
49	GEORGIA INST OF TECH	M G POTAPCZUK	LERC	L N SANKAR	NAG 3-768	3537
49	GEORGIA INST OF TECH	M P PROCTOR	LERC	R F SALANT	NAG 3-974	3538
49	GEORGIA INST OF TECH	E A PALMER	ARC	T GOVINDARAJ	NCC 2-675	3581
49	GEORGIA INST OF TECH	E A PALMER	ARC	C M MITCHELL	NCC 2-824	3582
49	MOREHOUSE COLLEGE	B PETERS	LARC	W JACKSON	NGT 00-090-025	3624
49	SPELMAN COLLEGE	B WHITE	HQ	E FALCONER	NGT 00-090-049	3628
49	UNIV OF HAWAII-MANOA	J C MORAKIS	GSFC	S LIN	NAG 5-931	3656
49	UNIV OF HAWAII-MANOA	W H MILLER	GSFC	S LIN	NAG 5-2613	3673
49	UNIV OF IDAHO	H LUM	ARC	D H ATKINSON	NCC 2-5006	3764
49	UNIV ILLINOIS-CHICGO	G MEYER	ARC	R GROSSMAN	NAG 2-513	3921
49	UNIV ILLINOIS-URBANA	T L PANONTIN	ARC	R	NCC 2-5022	3990
49	PURDUE UNIVERSITY	Y R HICKS	LERC	N M LAURENDEAU	NAG 3-1038	4060
49	PURDUE UNIVERSITY	M L BUTLER	MSFC	R E SKELTON	NAG 8-220	4069
49	PURDUE UNIVERSITY	A P BUKLEY	MSFC	R E SKELTON	NAG 8-930	4073
49	UNIV OF NOTRE DAME	J B MCQUILLEN	LERC	M J MCCREADY	NAG 3-1398	4124
49	UNIV OF NOTRE DAME	W H MILLER	GSFC	D COSTELLO	NAG 5-557	4127
49	UNIV OF IOWA	F C OWENS	HQ	J ARORA	NGT 00-050-362	4233
49	SO UNIV & A&M COL-BR	A S MCGEE	HQ	E HILDRETH	NGT 00-060-004	4355
49	XAVIER UNIV-LA	L WARREN	HQ	G W BAKER	NGT 00-090-004	4379
49	BOWIE STATE COLLEGE	G K JONES	GSFC	S SRIVASTAVA	NAG 5-1054	4386
49	MORGAN STATE UNIV	D MENCHAN	GSFC	C WHITE	NCA 5-105	4506
49	MORGAN STATE UNIV	D RUSSELL	HQ	E DELOATCH	NGT 00-090-042	4508
49	UNIV MARYLAND-COL PK	D J HEI	GSFC	E E MILLER	NAG 5-2648	4611
49	UNIV MARYLAND-COL PK	S M WANDER	HQ	M J LEWIS	NAGW 3715	4664

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
49	UNIV MARYLAND-COL PK	F C OWENS	HQ	J S BARAS	NGT 00-050-424	4707
49	UNIV MARYLAND-COL PK	A S MCGEE	HQ	H R BOROSON	NGT 00-060-006	4721
49	UNIV MD-EASTRN SHORE	B WHITE	HQ	B ANDERSON	NGT 00-090-045	4727
49	MASS INST OF TECH	J KOLAROV	LARC	S DUBOWSKY	NAG 1-801	4858
49	MASS INST OF TECH	D S MILLAR	LARC	I A WAITZ	NAG 1-1602	4873
49	MASS INST OF TECH	K CORKER	ARC	R J HANSMAN	NAG 2-716	4879
49	MASS INST OF TECH	T S WOODROW	ARC	R HAIMES	NAG 2-884	4884
49	MASS INST OF TECH	J T WALTON	LERC	J L KERREBROCK	NAG 3-1344	4899
49	MASS INST OF TECH	R M SULLIVAN	MSFC	H L MCMANUS	NAG 8-295	4954
49	MASS INST OF TECH	G I JOHNSTON	HQ	E F CRAWLEY	NAGW 1335	4979
49	MASS INST OF TECH	E W BULL	HQ	E F CRAWLEY	NAGW 2014	4994
49	MASS INST OF TECH	F C OWENS	HQ	D LANNING	NGT 00-050-843	5075
49	MICHIGAN STATE UNIV	K R SACKSTEDER	LERC	A ATREYA	NAG 3-1271	5165
49	UNIV MICH-ANN ARBOR	D STOCKER	LERC	G M FAETH	NAG 3-1245	5218
49	UNIV MICH-ANN ARBOR	K R SACKSTEDER	LERC	A ATREYA	NAG 3-1460	5221
49	UNIV MICH-ANN ARBOR	J S SOVEY	LERC	A D GALLIMORE	NAG 3-1572	5223
49	UNIV MICH-ANN ARBOR	J E BROOKER	LERC	J F DRISCOLL	NAG 3-1639	5224
49	UNIV MICH-ANN ARBOR	S C HARTMAN	HQ	F T ULABY	NAGW 1334	5260
49	UNIV MICH-ANN ARBOR	F C OWENS	HQ	D J WEINTRAUB	NGT23-5802	5349
49	U MINN-MNPLS-ST PAUL	R C TEW	LERC	S V PATANKAR	NAG 3-1024	5376
49	JACKSON STATE UNIV	B L WHITE	HQ	A K MOHAMED	NAGW 4092	5435
49	MISSISSIPPI STATE U	W H MILLER	GSFC	W J EBEL	NAG 5-2006	5447
49	MISSISSIPPI STATE U	K R SACKSTEDER	LERC	R A ALTENKIRCH	NAS 3-23901	5454
49	UNIV SO MISSISSIPPI	A S MCGEE	HQ	J E MILLER	NGT 00-060-003	5475
49	UNIV MO-COLUMBIA	S S PAI	LERC	G D GUTE	NAG 3-1477	5485
49	UNIV MO-COLUMBIA	R JUDAY	JSC	J KNOPP	NAG 9-466	5491
49	UNIV MO-COLUMBIA	B W WEBBON	ARC	S S NAIR	NCC 2-823	5497
49	DARTMOUTH COLLEGE	M M MELLOTT	HQ	C G FESEN	NAGW 2656	5633
49	DARTMOUTH COLLEGE	E A SCHMIDT	GSFC	C G FESEN	NAS 5-38056	5641
49	PRINCETON UNIVERSITY	J B HAGGARD	LERC	F L DRYER	NAG 3-1231	5725
49	NEW MEX ST U-LAS CR	D WILSON	GSFC	F CARDEN	NAG 5-1491	5830
49	NEW MEX ST U-LAS CR	W H MILLER	GSFC	W OSBORN	NAG 5-2142	5837
49	UNIV OF ALBUQUERQUE	W H MILLER	GSFC	K CAMERON	NAG 5-2285	5868
49	UNIV OF NEW MEXICO	K M PEECOOK	LERC	M S EL-GENK	NAG 3-1346	5870
49	UNIV OF NEW MEXICO	P YEY	GSFC	J VENBRUX	NAG 5-2166	5872
49	UNIV OF NEW MEXICO	P YEY	GSFC	K CAMERON	NAG 5-2190	5873
49	UNIV OF NEW MEXICO	W H MILLER	GSFC	S WHITAKER	NAG 5-2191	5874
49	UNIV OF NEW MEXICO	W H MILLER	GSFC	S WHITAKER	NAG 5-2204	5875
49	UNIV OF NEW MEXICO	W H MILLER	GSFC	J VENBRUX	NAG 5-2263	5876
49	UNIV OF NEW MEXICO	W H MILLER	GSFC	G K MAKI	NAG 5-2609	5877
49	UNIV OF NEW MEXICO	B WHITE	HQ	M LEE	NGT 00-090-052	5892
49	UNIV OF NEW MEXICO	O A GUTIERREZ	HQ	M LEE	NGT32-4770	5894
49	CITY U OF NY CTY COL	D K RUSSELL	HQ	C B WATKINS	NGT 00-090-235	5910
49	CLARKSON UNIVERSITY	D A HOPKINS	LERC	J H KANE	NAG 3-1089	5914
49	CLARKSON UNIVERSITY	P L MURTHY	LERC	L MINNETYAN	NAG 3-1101	5915
49	CLARKSON UNIVERSITY	J KU	GSFC	N T OBOT	NAG 5-2471	5919
49	CLARKSON UNIVERSITY	G A LESANE	HQ	D K AIDUN	NGT 00-051-345	5930
49	POLYTECHNIC U	R G SEASHOLTZ	LERC	M V OTUGEN	NAG 3-1301	6142
49	RENSSELAER POLY-NY	R W WILL	LARC	A C SANDERSON	NAG 1-1413	6152
49	RENSSELAER POLY-NY	R F LAWRENCE	LARC	N BURNETT	NAG 3-544	6156
49	RENSSELAER POLY-NY	J B MCQUILLEN	LERC	R T LAHEY	NAG 3-1400	6160
49	RENSSELAER POLY-NY	M D MONTEMERLO	HQ	G N SARIDIS	NAGW 1333	6167
49	RENSSELAER POLY-NY	R J HAYDUK	HQ	A DESROCHERS	NGT 00-010-000	6178
49	ROCHESTER INST TECH	J A HEMMINGER	LERC	A OGUT	NAG 3-1153	6195
49	STATE UNIV NY-BUFFAL	J L ROGERS	LARC	C L BLEEBAUM	NAG 1-1599	6229
49	STATE UNIV NY-BUFFAL	E J PRIOR	LARC	V SHALIN	NGT 00-050-992	6244
49	STATE U NY-STONY BRK	A KURKOV	LERC	H S DHADWALL	NAG 3-1526	6248
49	SYRACUSE UNIVERSITY	S WANDER	HQ	E F SPINA	NAGW 3713	6306
49	SYRACUSE UNIVERSITY	D K RUSSELL	HQ	T DENG	NGT 00-070-380	6309
49	FAYETTEVILLE STATE U	B WHITE	HQ	L EDWARDS	NGT 00-090-040	6354

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
49	NO CAROLINA STATE U	S M WANDER	HQ	F R DEJARNETTE	NAGW 1331	6395
49	SHAW UNIVERSITY	B WHITE	HQ	M CLAYTON	NGT 00-090-041	6432
49	CASE WESTERN RESERVE	R F LAWRENCE	LERC	M E BOULDING	NAG 3-406	6468
49	CASE WESTERN RESERVE	D A HOPKINS	ARC	D T DAVY	NAG 3-1027	6477
49	CASE WESTERN RESERVE	J A SALZMAN	LERC	J S T'EN	NAG 3-1046	6478
49	CASE WESTERN RESERVE	G R HALFORD	LERC	S S MANSON	NAG 3-1303	6490
49	CASE WESTERN RESERVE	W A WONG	LERC	M L ADAMS	NAG 3-1362	6492
49	CASE WESTERN RESERVE	G R HALFORD	LERC	S S MANSON	NAG 3-1363	6493
49	CASE WESTERN RESERVE	A D PLINE	LERC	S OSTRACH	NAS 3-25973	6507
49	CLEVELAND STATE UNIV	R C TEW	LERC	M B IBRAHIM	NAG 3-955	6581
49	CLEVELAND STATE UNIV	G C MADZSAR	LERC	P M FLANAGAN	NAG 3-1151	6583
49	CUYAHOGA COMMUNITY C	L RHODES	LERC	L NIRO	NAG 3-313	6635
49	OHIO STATE UNIV	C A STEARNS	LERC	A K DOMINEK	NAG 3-1108	6667
49	OHIO UNIVERSITY	R M HUESCHEN	LARC	F VAN GRAAS	NAG 1-1423	6734
49	OHIO UNIVERSITY	A P BUKLEY	MSFC	R D IRWIN	NAG 8-217	6735
49	UNIV OF AKRON	C F LORENZO	LERC	T T HARTLEY	NAG 3-1491	6758
49	UNIV OF CINCINNATI	S C HARTMAN	HQ	L M GALES	NAGW 1407	6802
49	UNIV OF CINCINNATI	J F ZAKRAJSEK	LERC	P DHAWAN	NCC 3-308	6814
49	UNIV OF CINCINNATI	E T SCHWARTZ	HQ	G J SIMITSES	NGT 00-010-014	6816
49	UNIV OF CINCINNATI	F C OWENS	HQ	K N GHIA	NGT 00-050-416	6818
49	UNIV OF DAYTON	W D MORRIS	LARC	C E EBELING	NAG 1-1327	6827
49	UNIV OF TOLEDO	P L MURTHY	LERC	S K MITAL	NAG 3-1264	6845
49	UNIV OF TOLEDO	A T CHAI	LERC	K J DEWITT	NCC 3-34	6866
49	UNIV OF TOLEDO	G G SADLER	LERC	W L SCHELLER II	NCC 3-333	6880
49	OREGON STATE UNIV	F C OWENS	HQ	A C KLEIN	NGT 00-050-829	6958
49	CARNEGIE-MELLON UNIV	D A HOPKINS	LERC	S SAIGAL	NAG 3-1487	6982
49	CARNEGIE-MELLON UNIV	D LAVERY	HQ	T KANADE	NAGW 1175	6986
49	CARNEGIE-MELLON UNIV	D LAVERY	HQ	R WHITTAKER	NAGW 2998	6987
49	CARNEGIE-MELLON UNIV	D B LAVERN	HQ	W L WHITTAKER	NAGW 3863	6988
49	CARNEGIE-MELLON UNIV	J K ALEXANDER	HQ	B MOREL	NGT 00-050-995	7003
49	LINCOLN UNIV-PA	Y B FREEMAN	HQ	W WILLIAMS	NGT 00-090-020	7040
49	PENN STATE U-UNIV PK	V L METCALF	LARC	S D SOMMERFELDT	NAG 1-1557	7060
49	PENN STATE U-UNIV PK	R S JANKOVSKY	LERC	L L PAULEY	NAG 3-1309	7077
49	PENN STATE U-UNIV PK	K W GROSS	MSFC	K K KUO	NAG 8-174	7119
49	PENN STATE U-UNIV PK	E E VANLANDINGHAM	HQ	C L MERKLE	NAGW 1356	7129
49	PENN STATE U-UNIV PK	G A WILHOLD	MSFC	C C MERKLE	NAS 8-38861	7163
49	PENN STATE U-UNIV PK	R J HARWELL	MSFC	K K KUO	NAS 8-39945	7166
49	PENN STATE U-UNIV PK	W CAMP	KSC	C A BERNECKER	NGT 00-051-226	7196
49	UNIV OF RHODE ISLAND	L C MARTIN	LERC	O J GREGORY	NAG 3-1428	7315
49	CLEMSON UNIV-CLEMSON	E PRIOR	LARC	D DINGER	NGT 00-051-195	7358
49	SO DAKOTA SCHL MINES	C WOOLLEY	JSC	T S ARNESON	NCC 9-24	7387
49	MEMPHIS ST UNIV	A S CHOW	MSFC	J D MO	NAG 8-211	7404
49	TENNESSEE STATE UNIV	L BERKE	LERC	C ONWVBIXO	NAG 3-1479	7410
49	TENNESSEE STATE UNIV	J E BOYD	LERC	D B ROGERS	NAG 3-1647	7411
49	VANDERBILT UNIVERSTY	G C HORNER	LARC	E GARCIA	NAG 1-1484	7456
49	PRAIRIE VIEW A&M U	M DIOQU	JSC	T N FOGARTY	NAG 9-659	7516
49	RICE UNIVERSITY	S GOLDSTEIN	JSC	A MEADE JR.	NAG 9-719	7542
49	RICE UNIVERSITY	S GOLDSTEIN	JSC	I D WALKER	NGT 00-070-251	7577
49	SOUTHERN METHODIST U	S GOLDSTEIN	JSC	J H DULA	NGT 00-050-536	7584
49	TEXAS A&M UNIVERSITY	R M HUESCHEN	LARC	J H PAINTER	NAG 1-1066	7590
49	TEXAS A&M UNIVERSITY	S M STEVENSON	LERC	A G PARLES	NAG 3-1235	7602
49	TEXAS A&M UNIVERSITY	S M STEVENSON	LERC	W E BOLCH	NAG 3-1326	7605
49	TEXAS A&M UNIVERSITY	J CHITWOOD	GSFC	F LITTLE	NAG 5-2221	7621
49	TEXAS A&M UNIVERSITY	J W SUNKEL	JSC	A G CARLOS	NAG 9-491	7629
49	TEXAS A&M UNIVERSITY	S H GOLDSTEIN	JSC	G L COTE	NAG 9-716	7639
49	TEXAS A&M UNIVERSITY	R TAYLOR	LARC	S R VADELI	NAS 1-19373	7655
49	TEXAS A&M UNIVERSITY	F C OWENS	HQ	A PARLOS	NGT 00-050-733	7669
49	TEXAS A&M UNIVERSITY	F C OWENS	HQ	A G PARLOS	NGT 00-070-185	7677
49	TEXAS A&M UNIVERSITY	S GOLDSTEIN	JSC	F R BEST	NGT 00-070-248	7679
49	TEXAS A&M UNIVERSITY	A S MCGEE	HQ	W A HYMAN	NGT44-1800	7690

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
49	TEXAS TECH UNIV	G MEYER	ARC	C F MARTIN	NAG 2-899	7706
49	UNIV HOUSTON	A S MCGEE	HQ	R B BANNEROT	NGT44-5803	7756
49	U TEX-PAN AM-EDNBURG	B WHITE	HQ	W SHOCKLEY	NGT 00-090-043	7772
49	UNIV TEXAS-ARLINGTON	S WANDER	HQ	D R WILSON	NAGW 3714	7810
49	UNIV TEXAS-AUSTIN	F F SIMON	LERC	M E CRAWFORD	NAG 3-864	7826
49	UNIV TEXAS-AUSTIN	G K KLUTE	JSC	M G PANDY	NAG 9-671	7857
49	UNIV TEXAS-AUSTIN	R J HAYDUK	HQ	G F CAREY	NGT 00-070-111	7930
49	UNIV TEXAS-S ANTONIO	B WHITE	HQ	M BERRIOZABAL	NAGW 3573	7979
49	UNIV TEXAS-S ANTONIO	B WHITE	HQ	L VALERDE	NGT 00-090-047	7982
49	BRIGHAM YOUNG UNIV	B W WEBBON	ARC	P CARTER	NAG 2-883	7986
49	HAMPTON UNIVERSITY	R L YANG	LARC	D D VENABLE	NCC 1-166	8118
49	HAMPTON UNIVERSITY	A S MCGEE	HQ	J W SPENCER	NGT47-20800	8119
49	NORFOLK STATE UNIV	J E GARDNER	LARC	J A JACOBS	NAG 1-1432	8123
49	NORFOLK STATE UNIV	S STOVALL-ALEXANDER	HQ	J S SHAY	NGT 00-090-160	8130
49	OLD DOMINION UNIV	N J GROOM	LARC	C P BRITCHER	NAG 1-1056	8140
49	OLD DOMINION UNIV	A S MCGEE	HQ	S N TIWARI	NGT47-3029	8203
49	UNIV OF VIRGINIA	A R WIETING	LARC	E A THORNTON	NAG 1-1013	8212
49	UNIV OF VIRGINIA	J R REAGAN	LERC	Y Y HAIMES	NAG 3-1356	8225
49	UNIV OF VIRGINIA	S L VENNERI	HQ	A K NOOR	NCCW 11	8268
49	UNIV OF VIRGINIA	F C OWENS	HQ	J J DORNING	NGT 00-050-793	8279
49	UNIV OF VIRGINIA	J ALEXANDER	HQ	R BARAGIOLA	NGT 00-050-905	8283
49	UNIV OF VIRGINIA	J ALEXANDER	HQ	R A BARAGIOLA	NGT 00-050-906	8284
49	UNIV OF VIRGINIA	E J PRIOR	LARC	E A THORNTON	NGT 00-051-114	8292
49	UNIV OF VIRGINIA	A NOVOTNY	HQ	J J DORNING	NGT 00-051-221	8294
49	VIRGINIA POLY INST	R S ROGOWSKI	LARC	R O CLAUS	NAG 1-1292	8330
49	VIRGINIA POLY INST	W J STROUD	LARC	E NIKOLAIDIS	NAG 1-1458	8342
49	VIRGINIA POLY INST	W K BELVIN	LARC	D J INMAN	NAG 1-1462	8343
49	WEST VIRGINIA UNIV	D BAYON	HQ	W REEVES	NAGW 2810	8589
49	UNIV WISC-MADISON	N J GROOM	LARC	H GUCKEL	NAG 1-1568	8623
49	UNIV WISC-MADISON	B M CARPENTER	HQ	S KOU	NAGW 3004	8702
49	U OF TURABO-PRTO RCO	R L YANG	LARC	W R DAWES	NAG 1-1347	8815
49	ISRAEL INST OF TECH	S R ELLIS	HQ	A J GRUNWALD	NCCW 45	8834
51	ALABAMA A&M UNIV	H MATSOS	MSFC	J JOHNSON	NAG 8-198	1006
51	ALABAMA A&M UNIV	D S NACHTWEY	JSC	P KALE	NAG 9-246	1014
51	ALABAMA A&M UNIV	R L SAUER	JSC	M G TADROS	NAG 9-758	1015
51	ALABAMA A&M UNIV	R C RUFF	MSFC	R B LAL	NAS 8-36634	1016
51	UNIV ALA-BIRMINGHAM	A VILLAMIL	HQ	C E BUGG	NAGW 813	1066
51	UNIV ALA-BIRMINGHAM	B HERREN	MSFC	L DELUCAS	NAS 8-36611	1072
51	UNIV ALA-HUNTSVILLE	F SIX	MSFC	J VAN ALSTINE	NAG 8-234	1100
51	UNIV ALA-HUNTSVILLE	B ANDERSON	MSFC	J WRIGHT	NAG 8-297	1103
51	UNIV ALA-HUNTSVILLE	T W HALSTEAD	HQ	M LEWIS	NAGW 2739	1135
51	UNIV ALA-TUSCALOOSA	L WANG	JSC	R E SMITH	NAG 9-625	1208
51	ARIZONA STATE UNIV	J D RUMMEL	HQ	R E BLANKENSHIP	NAGW 1395	1300
51	UNIV OF ARIZONA	C M WINGET	ARC	M E TISCHLER	NAG 2-384	1356
51	UNIV OF ARIZONA	E M HOLTON	ARC	E J HENRIKSEN	NAG 2-782	1359
51	UNIV OF ARIZONA	C F SAMS	JSC	S O KESSLER	NAG 9-442	1408
51	UNIV OF ARIZONA	S R GONDA	JSC	D W SAMMONS	NAG 9-537	1410
51	UNIV OF ARIZONA	T W HALSTEAD	HQ	M E TISCHLER	NAGW 3197	1475
51	UNIV OF ARIZONA	W M KNOTT	KSC	M T TISCHLER	NAG10-134	1511
51	UNIV OF ARIZONA	S R GONDA	JSC	D W SAMMONS	NAS 9-18433	1520
51	UNIV ARKANSAS-FAYETV	C P MCKAY	ARC	T A KRAL	NCC 2-5026	1577
51	SAN DIEGO STATE UNIV	T W HALSTEAD	HQ	D RAYLE	NAGW 3865	1785
51	SAN JOSE STATE UNIV	M L CORCORAN	ARC	R A FOX	NCC 2-449	1837
51	SAN JOSE STATE UNIV	M L CORCORAN	ARC	R A FOX	NCC 2-723	1844
51	SAN JOSE STATE UNIV	C M WINGET	ARC	D C HOLLEY	NCC 2-779	1846
51	SAN JOSE STATE UNIV	S M HING	ARC	D C HOLLEY	NCC 2-822	1848
51	SANTA CLARA UNIV	J D RUMMEL	HQ	H P KLEIN	NAGW 2378	1861
51	SANTA CLARA UNIV	L L JAHNKE	ARC	H P KLEIN	NCA 2-527	1862
51	STANFORD UNIVERSITY	M M AVERNER	HQ	P VITOUSEK	NAGW 1068	1915
51	STANFORD UNIVERSITY	M D ROSS	ARC	M W FELDMAN	NCC 2-778	1984

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
51	STANFORD UNIVERSITY	R GRYMES	ARC	R SCHIMKE	NCC 2-5066	1997
51	STANFORD UNIVERSITY	M MOORE	ARC	P VITOUSEK	NGT 00-050-895	2021
51	UNIV CALIF-BERKELEY	E M HOLTON	ARC	F H WILT	NAG 2-572	2054
51	UNIV CALIF-BERKELEY	T W HALSTEAD	HQ	L FELDMAN	NAGW 3605	2147
51	UNIV CALIF-BERKELEY	A NOVOTNY	HQ	M K FIRESTONE	NGT 00-051-222	2224
51	UNIV CALIF-BERKELEY	G LESANE	HQ	L FELDMAN	NGT 00-051-280	2227
51	UNIV CALIF-DAVIS	J P CONNOLLY	ARC	C A FULLER	NAG 2-587	2235
51	UNIV CALIF-DAVIS	C E WADE	ARC	J M HOROWITZ	NAG 2-788	2238
51	UNIV CALIF-DAVIS	J VERNIKOS	ARC	C A FULLER	NAG 2-801	2240
51	UNIV CALIF-DAVIS	C M WINGET	ARC	J VERNIKOS	NAG 2-840	2241
51	UNIV CALIF-DAVIS	D MORRISON	JSC	L WILEY	NAG 9-605	2252
51	UNIV CALIF-IRVINE	A D MANDEL	ARC	K M BALDWIN	NAG 2-555	2309
51	UNIV CALIF-L ANGELES	C M WINGET	ARC	V R EDGERTON	NAG 2-717	2351
51	UNIV CALIF-L ANGELES	C F SAMS	JSC	C E KASPER	NAG 9-323	2392
51	UNIV CALIF-L ANGELES	A PLAZA	JSC	R EGGERTON	NAS 9-18773	2467
51	UNIV CALIF-L ANGELES	J P CONNOLLY	ARC	V R EDGERTON	NCC 2-535	2472
51	UNIV CALIF-SAN DIEGO	C M WINGET	ARC	J B WEST	NAG 2-601	2501
51	UNIV CALIF-SAN DIEGO	J P CONNOLLY	ARC	S FOWLER	NAG 2-653	2502
51	UNIV CALIF-SAN DIEGO	C M WINGET	ARC	S BODINE-FOWLER	NAG 2-714	2503
51	UNIV CALIF-SAN DIEGO	R J WHITE	HQ	J B WEST	NAGW 897	2541
51	UNIV CALIF-SAN DIEGO	J D RUMMEL	HQ	G ARRHENIUS	NAGW 1031	2542
51	UNIV CALIF-SAN FRAN	C E WADE	ARC	I A REID	NAG 2-779	2614
51	UNIV CALIF-SAN FRAN	T W HALSTEAD	HQ	M H FULFORD	NAGW 1244	2619
51	UNIV CALIF-SAN FRAN	V ELLERBE	JSC	C CANN	NAS 9-18769	2621
51	UNIV CALIF-SAN FRAN	S B ARNAUD	ARC	E M HOLTON	NCC 2-589	2624
51	UNIV CALIF-SAN FRAN	E M HOLTON	ARC	C E CANN	NCC 2-597	2625
51	UNIV CALIF-SAN FRAN	E M HOLTON	ARC	R K GLOBUS	NCC 2-846	2628
51	UNIV COLORADO-BOLDR	M KLISS	ARC	M W LUTTGES	NCA 2-713	3039
51	U CONN HLTH CTR-FARM	T W HALSTEAD	HQ	D W ROWE	NAGW 3332	3138
51	YALE UNIVERSITY	R D MACELROY	ARC	A W GALSTON	NCC 2-726	3166
51	UNIV OF DELAWARE	R SNYDER	MSFC	A LENHOFF	NAG 8-1038	3188
51	UNIV OF DELAWARE	J K ALEXANDER	HQ	A M LENHOFF	NAGW 2798	3194
51	FLORIDA INST OF TECH	B MARTIN	KSC	R C WEIGEL	NGT 00-050-967	3324
51	FLORIDA STATE UNIV	O THIELE	GSFC	P S SMITH	NAG 5-2719	3343
51	FLORIDA STATE UNIV	M MEYER	HQ	E I FRIEDMANN	NAGW 4044	3359
51	UNIV OF FLORIDA	W M KNOTT	KSC	D J CANTLIFFE	NAG10-100	3430
51	UNIV OF FLORIDA	D R BUBENHEIM	ARC	T WRONSKI	NCC 2-825	3440
51	UNIV OF MIAMI	W C PATZERT	HQ	H C GRABER	NAGW 2672	3465
51	UNIV OF SO FLORIDA	G SPAULDING	JSC	J L BECKER	NAG 9-648	3483
51	UNIV OF SO FLORIDA	W M KNOTT	KSC	K A FLANNING	NAG10-130	3491
51	EMORY UNIVERSITY	G K SCHMIDT	ARC	V POPOVIC	NAS 2-10527	3512
51	GEORGIA INST OF TECH	D K RUSSELL	HQ	P GIRARD	NGT 00-070-363	3607
51	GEORGIA STATE UNIV	P X CALLAHAN	ARC	D M RUMBAUGH	NAG 2-438	3619
51	UNIV OF IDAHO	D A REIS-BUBENHEIM	ARC	M E DESANTIS	NCC 2-862	3763
51	NORTHWESTERN UNIV	T W HALSTEAD	HQ	R S DECKER	NAGW 3615	3809
51	UNIV OF CHICAGO	M L CORCORAN	ARC	J M GOLDBERG	NAG 2-785	3837
51	UNIV ILLINOIS-URBANA	S M HING	ARC	P C HARRISON	NAG 2-863	3941
51	UNIV ILLINOIS-URBANA	J D RUMMEL	HQ	C R WOESE	NAGW 2554	3981
51	INDIANA ST UNIV	J ALEXANDER	HQ	D PRENTICE	NGT 00-050-911	4015
51	IND U-PURDUE-INDAPLS	C M WINGET	ARC	W E ROBERTS	NAG 2-756	4016
51	IND U-PURDUE-INDAPLS	E M HOLTON	ARC	W E ROBERTS	NCC 2-594	4019
51	INDIANA U-BLOOMINGTN	D A REISS-BUBENHIEM	ARC	J R ALBERTS	NCC 2-870	4030
51	PURDUE UNIVERSITY	T W HALSTEAD	HQ	C MITCHELL	NAGW 3843	4084
51	PURDUE UNIVERSITY	W M KNOTT	KSC	C A MITCHELL	NAG10-93	4088
51	PURDUE UNIVERSITY	W M KNOTT	KSC	M OKOS	NAG10-112	4089
51	KANSAS STATE UNIV	F SIX	MSFC	B S SPOONER	NAG 8-246	4240
51	KANSAS STATE UNIV	R J WHITE	HQ	B S SPOONER	NAGW 2328	4242
51	UNIV OF LOUISVILLE	R BALLARD	ARC	G SONNENFELD	NAG 2-624	4299
51	UNIV OF LOUISVILLE	J P CONNOLLY	ARC	G SONNENFELD	NAG 2-707	4300
51	UNIV OF LOUISVILLE	G TAYLOR	JSC	G SONNENFELD	NAG 9-485	4301

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
51	UNIV OF LOUISVILLE	T HALSTEAD	HQ	G SONNENFELD	NAGW 70	4303
51	UNIV OF LOUISVILLE	T W HALSTEAD	HQ	G SONNENFELD	NAGW 4031	4304
51	UNIV OF LOUISVILLE	R W BALLARD	ARC	G SONNENFELD	NCA 2-687	4306
51	LA ST U&A&M COL-BRGE	T W HALSTEAD	HQ	M MUSGRAVE	NAGW 3759	4328
51	LA ST U&A&M COL-BRGE	W KNOTT	JSC	M E MUSGRAVE	NAG10-75	4329
51	TULANE UNIVERSITY	L I HOCHSTEIN	ARC	E J JOHNSON	NCC 2-5011	4365
51	TULANE UNIVERSITY	F C OWENS	HQ	A L WEIDEN	NGT 00-050-550	4367
51	UNIV SOUTHWESTERN LA	T W HALSTEAD	HQ	K H HASENSTEIN	NAGW 3565	4376
51	BOWDOIN COLLEGE	T W HALSTEAD	HQ	C R PHILLIPS	NAGW 1719	4380
51	JOHNS HOPKINS UNIV	G SPAULDING	JSC	W M SALTZMAN	NAG 9-654	4444
51	JOHNS HOPKINS UNIV	D L TOMKO	ARC	L B MINOR	NCC 2-5081	4495
51	UNIV MARYLAND-COL PK	M L CORCORAN	ARC	A N POPPER	NAG 2-787	4536
51	UNIV MARYLAND-COL PK	J K ALEXANDER	HQ	J A REGGIA	NAGW 2805	4644
51	BRANDEIS UNIVERSITY	F R SULZMAN	HQ	J R LACKNER	NAGW 4065	4771
51	HARVARD UNIVERSITY	P X CALLAHAN	ARC	S F VATNER	NAG 2-451	4783
51	HARVARD UNIVERSITY	E M HOLTON	ARC	A GOLDBERG	NAG 2-704	4784
51	HARVARD UNIVERSITY	R D MACELROY	ARC	R MITCHELL	NAG 2-843	4786
51	HARVARD UNIVERSITY	D K RUSSELL	HQ	L BUELL	NGT 00-090-172	4856
51	MASS INST OF TECH	M M COHEN	ARC	L R YOUNG	NAG 2-445	4876
51	MASS INST OF TECH	D L PIERSON	JSC	A L DEMAINE	NAG 9-602	4969
51	MASS INST OF TECH	G SPAULDING	JSC	L E FREED	NAG 9-655	4970
51	MASS INST OF TECH	M BALTUCK	HQ	L H ROYDEN	NAGW 1951	4991
51	MASS INST OF TECH	J D RUMMEL	HQ	A RICH	NAGW 2341	5003
51	UNIV OF MASS-AMHERST	J D RUMMELT	HQ	L MARGOLIS	NAGW 1989	5118
51	MICHIGAN TECH UNIV	M MOORE	ARC	W C KERFOOT	NGT 00-051-024	5192
51	UNIV MICH-ANN ARBOR	G SPAULDING	HQ	B PALSSON	NAG 9-652	5255
51	UNIV MICH-ANN ARBOR	M M AVERNER	HQ	B O PALSSON	NAGW 2608	5285
51	UNIV MICH-ANN ARBOR	T W HALSTEAD	HQ	P B KAUFMAN	NAGW 3789	5293
51	UNIV MICH-ANN ARBOR	D A REISS-BUBENHEIM	ARC	K I CLARK	NCC 2-856	5319
51	BEMIDJI STATE UNIV	C YANG	JSC	A L LINDGREN	NAG 9-623	5364
51	UNIV MISS-MEDL CNTR	M L CORCORAN	ARC	J D DICKMAN	NAG 2-786	5464
51	UNIV MISS-MEDL CNTR	D A REISS-BUBENHEIM	ARC	R B JOHNSON	NCC 2-863	5465
51	ST LOUIS UNIVERSITY	E M HOLTON	ARC	N C PARTRIDGE	NAG 2-454	5477
51	ST LOUIS UNIVERSITY	E M HOLTON	ARC	N C PARTRIDGE	NAG 2-888	5478
51	ST LOUIS UNIVERSITY	F C OWENS	HQ	N C PARTRIDGE	NGT 00-050-673	5480
51	WASHINGTON UNIVERSITY	G SPAULDING	GSFC	D W SCHARP	NAG 9-653	5518
51	WASHINGTON UNIVERSTY	T W HALSTEAD	HQ	B G PICKARD	NAGW 3046	5534
51	CREIGHTON UNIVERSITY	D A REISS-BUBENHEIM	ARC	B FRITZSCH	NCC 2-861	5578
51	UNIV NEBRASKA-LINCLN	T W HALSTEAD	HQ	T A JONES	NAGW 1275	5593
51	UNIV NEB-OMAHA	F SIX	MSFC	J RASLER	NAG 8-221	5604
51	ROWAN COLL OF N.J.	F SIX	MSFC	V BROWN	NAG 8-995	5785
51	CITY U OF NY CTY COL	T W HALSTEAD	HQ	M P SCHREIBMAN	NAGW 1704	5903
51	CLARKSON UNIVERSITY	W ORAN	HQ	W R WILCOX	NAGW 976	5923
51	CORNELL UNIVERSITY	T TRI	JSC	R W LANGHANS	NAG 9-715	6049
51	CORNELL UNIVERSITY	T W HALSTEAD	HQ	R WAYNE	NAGW 3341	6082
51	CORNELL UNIVERSITY	R WHITE	HQ	R W ZOBEL	NGT 00-051-075	6110
51	MT SINAI SCH OF MED	C M WINGET	ARC	B COHEN	NAG 2-706	6127
51	MT SINAI SCH OF MED	D L TOMKO	ARC	B COHEN	NAG 2-804	6128
51	MT SINAI SCH OF MED	E M HOLTON	ARC	R J MAJESKA	NAG 2-895	6129
51	NEW YORK UNIVERSITY	M L CORCORAN	ARC	R R LLINAS	NAG 2-662	6132
51	RENSSELAER POLY-NY	D C GILLIES	MSFC	A G OSTROGORSKY	NAG 8-952	6165
51	STATE UNIV NY-BUFFAL	N G ROBERTSON	JSC	L C SHACKELFORD	NAG 9-762	6238
51	STATE UNIV NY-BUFFAL	T W HALSTEAD	HQ	M A BISSON	NAGW 3630	6240
51	STATE UNIV NY-BUFFAL	F M SULZMAN	HQ	L E FARHI	NAGW 3937	6241
51	STATE UNIV NY-BUFFAL	W M KNOTT	KSC	M A BISSON	NAG10-99	6242
51	STATE U NY-STONY BRK	W M KNOT	KSC	A D KRIKORIAN	NAG10-70	6280
51	EAST CAROLINA UNIV	C M WINGET	ARC	H W BURDEN	NCC 2-810	6349
51	EAST CAROLINA UNIV	D A REISS-BUBENHEIM	ARC	R H RENEGAR	NCC 2-864	6350
51	EAST CAROLINA UNIV	D A REISS-BUBENHEIM	ARC	H W BURDEN	NCC 2-866	6351
51	UNIV N CAR-CHPL HILL	F M SULZMAN	HQ	M YAMAUCHI	NAGW 3946	6444

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
51	WAKE FOREST UNIV	T W HALSTEAD	HQ	G MUDAY	NAGW 4052	6451
51	WAKE FOREST UNIV	G C JAHNS	ARC	P M HUTCHINS	NAS 2-10523	6452
51	CASE WESTERN RESERVE	D L HARM	JSC	R J LEIGH	NAG 9-571	6505
51	KENYON COLLEGE	T W HALSTEAD	HQ	K L EDWARDS	NAGW 2143	6652
51	MIAMI UNIVERSITY	T W HALSTEAD	HQ	J KISS	NAGW 3783	6656
51	OHIO STATE UNIV	T W HALSTEAD	HQ	F D FISK	NAGW 3594	6706
51	OHIO STATE UNIV	T W HALSTEAD	HQ	M L EVANS	NAGW 3730	6709
51	OHIO STATE UNIV	T W HALSTEAD	HQ	R HANGARTEN	NAGW 3982	6711
51	OHIO STATE UNIV	W M KNOTT	KSC	M L EVANS	NAG10-84	6712
51	OHIO STATE UNIV	W M KNOTT	KSC	F D SACK	NAG10-85	6713
51	OHIO STATE UNIV	F C OWENS	HQ	F D SACK	NGT 00-050-668	6724
51	OHIO STATE UNIV	G LESANE	HQ	F SACK	NGT 00-051-281	6730
51	UNIV OF CINCINNATI	G LESANE	HQ	S A KHAN	NGT 00-051-367	6824
51	OREGON HLTH SCNCS U	T W HALSTEAD	HQ	M DANILCHIK	NAGW 3798	6913
51	OREGON STATE UNIV	T W HALSTEAD	HQ	T LOMAX	NAGW 3716	6940
51	OREGON STATE UNIV	F C OWENS	HQ	T LOMAX	NGT 00-050-321	6956
51	REED COLLEGE	K A SOUZA	ARC	S D BLACK	NCA 2-691	6962
51	PENN STATE U-UNIV PK	R C DARTY	MSFC	W C HUMER	NAG 8-953	7125
51	PENN STATE U-UNIV PK	T W HALSTEAD	HQ	D J COSGROVE	NAGW 3333	7147
51	PENN STATE U-UNIV PK	T W HALSTEAD	HQ	J A FRANGOS	NAGW 3358	7148
51	PENN STATE U-UNIV PK	C M W'NGET	ARC	W C HYMER	NCC 2-370	7170
51	UNIV OF PITTSBURGH	J VILLARREAL	JSC	T H MONK	NAS 9-18404	7241
51	UNIV OF RHODE ISLAND	J H STOKLOSA	HQ	A CRUICKSHANK	NAGW 3645	7325
51	UNIV OF RHODE ISLAND	M MEYER	HQ	D DES MARAIS	NAGW 4045	7328
51	UNIV TENNESSEE-KNOXV	T W HALSTEAD	HQ	B V CONGER	NAGW 3141	7443
51	U OF TENN.-MEMPHIS	W E HINDS	ARC	A T ICHIKI	NAG 2-494	7454
51	BAYLOR COL OF MED	A D MANDEL	ARC	C P ALFREY	NAG 2-500	7488
51	BAYLOR COL OF MED	J K ALEXANDER	HQ	J I MULHOLLAND	NAGW 2862	7490
51	RICE UNIVERSITY	T W HALSTEAD	HQ	J BRAAM	NAGW 3139	7553
51	TEXAS A&M UNIVERSITY	D L HENNINGER	JSC	B ETTER	NAG 9-582	7632
51	TEXAS A&M UNIVERSITY	D HENNINGER	JSC	M DREW	NAG 9-669	7637
51	TEXAS A&M UNIVERSITY	F C OWENS	HQ	E RYKIEL	NGT 00-050-690	7668
51	UNIV HOUSTON	W A ORAN	HQ	C W CHU	NAGW 977	7742
51	UNIV HOUSTON	J D RUMMEL	HQ	G E FOX	NAGW 2108	7743
51	U TEX MED BRANCH-GAL	M D ROSS	ARC	A A PERACHIO	NAG 2-26	7757
51	U TEX MED BRANCH-GAL	N G DAUNTON	ARC	J P GALLAGHER	NAG 2-260	7758
51	U TEX MED BRANCH-GAL	J P CONNOLLY	ARC	M J CORREIA	NAG 2-446	7759
51	U TEX MED BRANCH-GAL	M L CORCORAN	ARC	S L COCHRAN	NAG 2-780	7760
51	U TEX MED BRANCH-GAL	H LANE	JSC	R WOLFE	NAS 9-18967	7763
51	U TEX HLTH SC CTR-SA	C M WINGET	ARC	M L WIDERHOLD	NAG 2-730	7766
51	U TEX HLTH SC CTR-HU	F M SULZMAN	HQ	F W BOOTH	NAGW 3908	7791
51	U TEX HLTH SC CTR-HU	C M WINGET	ARC	P J DUKE	NCC 2-423	7792
51	U TEX HLTH SC CTR-HU	C M WINGET	ARC	P J DUKE	NCC 2-876	7793
51	UNIV TEXAS-AUSTIN	G SPAULDING	JSC	R M BROWN	NAG 9-397	7847
51	UNIV TEXAS-AUSTIN	T W HALSTEAD	HQ	S J ROUX	NAGW 1519	7864
51	UNIV TEXAS-AUSTIN	W M KNOTT	KSC	R M BROWN JR.	NAG10-143	7897
51	UNIV TEXAS-AUSTIN	G LESANE	HQ	B G SANDERS	NGT 00-051-365	7928
51	UNIV TEXAS-S ANTONIO	R A GRYMES	ARC	A O MARTINEZ	NAG 2-819	7976
51	UNIV OF UTAH	S B ARNAUD	ARC	W S JEE	NAG 2-435	7995
51	UTAH STATE UNIV	W M KNOTT	KSC	E E HOOD	NAG10-140	8032
51	UTAH STATE UNIV	R D MACELROY	ARC	F B SALISBURY	NCC 2-139	8037
51	U VERMONT & ST AGR C	T W HALSTEAD	HQ	P M LINTILHAC	NAGW 3604	8049
51	E VA MED SC-HMPTN RD	C M WINGET	ARC	D B SPANGENBERG	NAG 2-343	8089
51	E VA MED SC-HMPTN RD	C M WINGET	ARC	D B SPANGENBERG	NAG 2-767	8090
51	GEORGE MASON UNIV	L I HOCHSTEIN	ARC	H MOROWITZ	NAG 2-907	8092
51	GEORGE MASON UNIV	S CHANG	ARC	H MOROWITZ	NCA 2-487	8104
51	OLD DOMINION UNIV	W M KNOTT	KSC	F P DAY	NAG10-110	8171
51	UNIV OF VIRGINIA	J D RUMMEL	HQ	R H KRETSINGER	NAGW 1233	8242
51	VIRGINIA COMNWLTH U	S M FURTNEY	JSC	D L ECKBERG	NAG 9-412	8409
51	UNIV OF WASHINGTON	C F SAMS	JSC	P VERDUGO	NAG 9-604	8456

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
51	UNIV OF WASHINGTON	T W HALSTEAD	HQ	R E CLELAND	NAGW 3755	8505
51	UNIV OF WASHINGTON	W M KNOTT	KSC	R E CLELAND	NAG10-77	8510
51	UNIV OF WASHINGTON	G LESANE	HQ	S S CARLSON	NGT 00-051-279	8559
51	WASHINGTON ST UNIV	T W HALSTEAD	HQ	N G LEWIS	NAGW 3672	8571
51	WASHINGTON ST UNIV	T W HALSTEAD	HQ	B W POOVAIAH	NAGW 3807	8572
51	MARSHALL UNIVERSITY	T W HALSTEAD	HQ	M HARRISON	NAGW 3859	8582
51	MARQUETTE UNIVERSITY	S B ARNAUD	ARC	R H FITTS	NAG 2-212	8609
51	MED COL OF WISC	A D MANDEL	ARC	D A RILEY	NAG 2-552	8616
51	MED COL OF WISC	C M WINGET	ARC	D A RILEY	NAG 2-633	8617
51	UNIV WISC-MADISON	E M HOLTON	ARC	E SCHULTZ	NAG 2-671	8625
51	UNIV WISC-MADISON	R BALLARD	ARC	A C VAILAS	NAG 2-769	8626
51	UNIV WISC-MADISON	V CEVENINI	HQ	J G BOLLINGER	NAGW 975	8680
51	UNIV WISC-MADISON	T W HALSTEAD	HQ	E SCHULTZ	NAGW 3987	8719
51	UNIV WISC-MADISON	M M AVERNER	HQ	T W TIBBITTS	NAGW 4022	8720
51	UNIV WISC-MADISON	T W HALSTEAD	HQ	P MASSON	NAGW 4053	8721
51	UNIV WISC-MADISON	W L HOWER	ARC	L COE	NAS 2-12939	8725
51	UNIV WISC-MADISON	E M HOLTON	ARC	A C VAILAS	NCC 2-619	8739
51	UNIV WISC-MILWAUKEE	G SPAULDING	JSC	P I LELKES	NAG 9-651	8762
51	UNIV WISC-MILWAUKEE	J D RUMMEL	HQ	K NEALSON	NAGW 3270	8763
51	UNIV WISC-MILWAUKEE	D HOLLAND	HQ	P I LELKES	NGT 00-051-265	8765
51	U PUERTO RICO-RIO PI	F SIX	MSFC	R LUGO-ESCHENWALD	NAG 8-260	8810
51	U PUERTO RICO-RIO PI	D K RUSSELL	HQ	G TORANZOS	NGT 00-070-393	8814
54	ALABAMA A&M UNIV	R WALKER	MSFC	C LOWE	NAG 8-1039	1013
54	OAKWOOD COLLEGE	F SIX	MSFC	A PAUL	NAG 8-997	1047
54	ARKANSAS STATE UNIV	W ST. CYR	SSC	P SHERMAN	NAG13-30	1571
54	CALIF INST OF TECH	D P BLANCHARD	JSC	D S BURNETT	NAG 9-702	1625
54	CAL STATE U-FRESNO	D L PETERSON	ARC	J F PARIS	NAG 2-802	1748
54	SIERRA COLLEGE	A HUSAIN	NRO	M DOBECK	NAG 7-1	1872
54	STANFORD UNIVERSITY	M M AVERNER	HQ	J ROUGHGARDEN	NAGW 2159	1923
54	UNIV CALIF-BERKELEY	D L PETERSON	ARC	R C SPEAR	NCC 2-5102	2192
54	UNIV CALIF-DAVIS	D L PETERSON	ARC	R K WASHINO	NCC 2-860	2279
54	UNIV CALIF-L ANGELES	D BUBENHEIM	ARC	W BERRY	NCA 2-806	2470
54	UNIV OF NORTHERN COL	F SIX	MSFC	C JACKSON	NAG 8-227	3134
54	UNIV OF CONNECTICUT	M M AVERNER	HQ	S PACALS	NAGW 2088	3143
54	GEORGE WASHINGTON U	P O'NEILL	GSFC	N CHAUHAN	NAG 5-2325	3217
54	HOWARD UNIVERSITY	P A MATSON	ARC	B H DAHLIN	NAG 2-585	3233
54	HOWARD UNIVERSITY	J D RUMMEL	HQ	D W SCHWARTMAN	NAGW 2931	3243
54	FLA INTERNATIONAL U	M M AVERNER	HQ	L L RICHARDSON	NAGW 2092	3287
54	FLORIDA ATLANTIC U	L MACDOWELL	KSC	S M LIPKA	NAG10-104	3313
54	FLORIDA STATE UNIV	J D RUMMEL	HQ	E I FRIEDMANN	NAGW 1871	3351
54	GEORGIA INST OF TECH	J D RUMMEL	HQ	D E CANFIELD	NAGW 3117	3563
54	DILLARD UNIVERSITY	F SIX	MSFC	G ROCHON	NAG 8-1010	4309
54	U OF MD CEN EN ES ST	G A SOFFEN	GSFC	S W SEAGLE	NAG 5-2042	4390
54	SE MISSOURI STATE U	F SIX	MSFC	D PROBET	NAG 8-993	5482
54	MONTANA STATE UNIV	J D RUMMEL	HQ	D M WARD	NAGW 2764	5562
54	UNIV NEVADA-DRI	J D RUMMEL	HQ	R A WHARTON	NAGW 1947	5610
54	UNIV NEW HAMP-DURHAM	M M AVERNER	HQ	R HARRISS	NAGW 1726	5672
54	PRINCETON UNIVERSITY	M M AVERNER	HQ	S A LEVIN	NAGW 3124	5763
54	DREXEL UNIVERSITY	F ROBERTSON	MSFC	D PERKEY	NAG 8-298	7021
54	PENN STATE U-UNIV PK	R C DARTY	MSFC	W C HYMER	NAG 8-807	7122
54	LAMAR UNIVERSITY	D M HOY	JSC	K LI	NAG 9-696	7506
54	LAMAR UNIVERSITY	D M HOY	JSC	K LI	NAG 9-697	7507
54	TEXAS A&M UNIVERSITY	-	JSC	L R HOZZNER	NAG 9-642	7635
54	TEXAS SOUTHERN UNIV	D HENNINGER	JSC	R F WILSON	NAG 9-765	7702
54	UNIV TEXAS-AUSTIN	J D RUMMEL	HQ	E R PIANKA	NAGW 2815	7878
54	UNIV TEXAS-EL PASO	D L PETERSON	ARC	S A STARKS	NAG 2-670	7954
54	OLD DOMINION UNIV	J A BENSON	LARC	R L BEDENBAUGH	NAG 1-1551	8158
54	NORTHWEST INDIAN COL	F SIX	MSFC	D BURNS	NAG 8-1000	8420
54	WESTERN WASHINGTON U	F SIX	MSFC	D ENGELATON	NAG 8-213	8578
54	UNIV WISC-MADISON	W KNOTT	KSC	H SCHATTEN	NAG10-64	8723

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
54	UNIV OF WYOMING	J K ALEXANDER	HQ	W K SMITH	NAGW 2808	8779
54	U PUERTO RICO MED SC	A T JOYCE	SSC	J NORAT	NAG13-19	8783
55	UNIV CALIF-BERKELEY	W M KNOTT	KSC	L FELDMAN	NAG10-80	2164
55	UNIV CALIF-DAVIS	J SALUTE	ARC	J GRANETT	NCA 2-804	2273
55	UNIV CALIF-DAVIS	R D MACELROY	ARC	R C HUFFAKER	NCC 2-99	2276
55	UNIV CALIF-L ANGELES	W M KNOTT	KSC	W L BERRY	NAG10-52	2462
55	UNIV CALIF-RIVERSIDE	H ASHKENAS	JPL	O A CHADWICK	NGT 00-070-261	2493
55	COLORADO STATE UNIV	D L HENNINGER	JSC	W L LINDSAY	NAG 9-576	2782
55	COLORADO STATE UNIV	R WHITE	HQ	R GOTSHALL	NGT 00-051-146	2804
55	UNIV OF DELAWARE	S GOLDSTEIN	JSC	D L SPARKS	NGT 00-050-871	3203
55	UNIV OF FLORIDA	W M KNOTT	KSC	R DARNELL	NAG10-133	3433
55	UNIV OF FLORIDA	W M KNOTT	KSC	R J FERL	NAG10-145	3435
55	UNIV OF FLORIDA	W CAMP	KSC	D J CANTLIFFE	NGT 00-050-968	3449
55	UNIV OF FLORIDA	W MARTIN	KSC	R L DARNELL	NGT 00-051-218	3450
55	UNIV OF GEORGIA	P GILL	MSFC	W SIMONTON	NAG 8-209	3647
55	LA ST U&A&M COL-BRGE	W M KNOTT	KSC	M E MUSGRAVE	NAG10-139	4330
55	LA ST U&A&M COL-BRGE	B MARTIN	KSC	M E MUSGRAVE	NGT 00-051-097	4337
55	UNIV OF MASS-AMHERST	G LESANE	HQ	K A COREY	NGT 00-051-282	5132
55	MICHIGAN STATE UNIV	F C OWENS	HQ	K L POFF	NGT 00-050-791	5174
55	UNIV MICH-ANN ARBOR	W M KNOTT	KSC	P KAUFMAN	NAG10-69	5297
55	RUTGERS ST U-N BRNSK	M M AVERNER	HQ	H W JANES	NAGW 4109	5795
55	RUTGERS ST U-N BRNSK	R D MACELROY	ARC	H W JANES	NCA 2-664	5796
55	CORNELL UNIVERSITY	J MAZZURCO	ARC	J M DUXBURY	NAG 2-742	6019
55	CORNELL UNIVERSITY	G SOFFEN	GSFC	W BRUTSAERT	NGT 00-051-211	6112
55	STATE U NY-STONY BRK	W M KNOTT	KSC	A D DRIKORIAN	NAG10-146	6281
55	NO CAROLINA STATE U	R MACELROY	ARC	C D RAPERJR	NCC 2-101	6418
55	OREGON STATE UNIV	J ALEXANDER	HQ	R WARING	NGT 00-050-914	6959
55	UNIV TENNESSEE-KNOXV	W M KNOTT	KSC	B V CONGER	NAG10-138	7447
55	TEXAS A&M UNIVERSITY	S GOLDSTEIN	JSC	L R HOSSNER	NGT 00-051-229	7673
55	TEXAS SOUTHERN UNIV	D BARTA	JSC	O A JEJELOWO	NAG 9-712	7700
55	UNIV TEXAS-AUSTIN	R WHITE	HQ	S ROUX	NGT 00-051-065	7924
55	UTAH STATE UNIV	G C JAHNS	ARC	F B SALISBURY	NCC 2-831	8038
55	UTAH STATE UNIV	G BINGHAM	ARC	G BINGHAM	NCC 2-5039	8039
55	UTAH STATE UNIV	A C MCCORMACK	ARC	B BUGBEE	NCC 2-5075	8040
55	UNIV WISC-MADISON	R D MACELROY	ARC	TIBBITTS	NAG 2-838	8627
55	UNIV WISC-MADISON	J ALEXANDER	HQ	T TIBBITTS	NGT 00-050-956	8747
56	UNIV ALA-BIRMINGHAM	D LONGEDDY	HQ	L J DELUCAS	NAGW 4041	1070
56	UNIV ALA-HUNTSVILLE	R L SAUER	JSC	W CRUMP	NAS 9-18403	1161
56	UNIV ALA-HUNTSVILLE	S GOLDSTEIN	KSC	G A DUDLEY	NGT 00-051-121	1177
56	UNIV OF ARIZONA	D L BUBENHEIM	ARC	M H JENSEN	NCA 2-537	1521
56	CAL STATE U-CHICO	J S SALUTE	ARC	J R BURLEIGH	NCA 2-815	1746
56	STANFORD UNIVERSITY	R WHALEN	ARC	S A NAPEL	NCC 2-5088	2002
56	UNIV CALIF-L ANGELES	R E GRINDELAND	ARC	V R EDGERTON	NAG 2-450	2347
56	UNIV CALIF-L ANGELES	J W FISCHER	ARC	V MANOUSIOUTHAKIS	NAG 2-822	2354
56	UNIV CALIF-L ANGELES	R E GRINDELAND	ARC	V R EDGERTON	NCC 2-869	2475
56	UNIV CALIF-L ANGELES	M MOORE	ARC	V R EDGERTON	NGT 00-051-175	2484
56	UNIV CALIF-SAN DIEGO	J B CHARLES	JSC	J B WEST	NAG 9-271	2536
56	UNIV CALIF-SAN DIEGO	A R HARGENS	ARC	B J TUCKER	NCC 2-556	2596
56	UNIV CALIF-SAN DIEGO	C C WADE	ARC	A R HARGENS	NCC 2-852	2601
56	UNIV CALIF-SAN FRAN	C M WINGET	ARC	C CANN	NAG 2-790	2615
56	UNIV CALIF-SAN FRAN	V S SCHNEIDER	JSC	C E CANN	NAG 9-327	2616
56	UNIV CALIF-SAN FRAN	V S SCHNEIDER	JSC	H K GENANT	NAG 9-603	2617
56	UNIV CALIF-SAN FRAN	L TAGGART	JSC	N E LANE	NAG 9-689	2618
56	UNIV CALIF-SAN FRAN	J VERNIKOS	ARC	M F DALLMAN	NCC 2-764	2626
56	UNIV SAN FRANCISCO	F SULZMAN	HQ	E U BENTON	NAGW 4154	2709
56	COLORADO STATE UNIV	D R MORRISON	JSC	J LETT	NAG 9-10	2781
56	COLORADO STATE UNIV	D MORRISON	JSC	J METT	NAG 9-583	2783
56	COLORADO STATE UNIV	F M SULZMAN	HQ	J T LETT	NAGW 3957	2787
56	U COL HLTH SCI CTR	C F SAMS	JSC	R T MEEHAN	NAG 9-612	2806
56	UNIV COLORADO-BOLDR	D GOLDWATER	ARC	M LUTTGES	NCA 2-759	3040

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
56	FLORIDA INST OF TECH	B WILLIAMS	KSC	A M DHOPLE	NAG10-106	3321
56	UNIV OF FLORIDA	R J WHITE	HQ	R R GRAMS	NAGW 3570	3426
56	UNIV OF FLORIDA	A KOLLER	KSC	R R GRAMS	NAG10-41	3429
56	UNIV OF FLORIDA	I D LONG	KSC	R J MELKER	NAS10-11880	3439
56	MOREHOUSE SCHOOL MED	R BILICA	JSC	W SULLIVAN	NAG 9-547	3625
56	MOREHOUSE SCHOOL MED	C SAMS	JSC	G L SANFORD	NAG 9-644	3626
56	UNIV OF GEORGIA	S GOLDSTIEN	JSC	S FELDMAN	NGT 00-050-739	3650
56	UNIV OF GEORGIA	S GOLDSTEIN	KSC	G A DUDLEY	NGT 00-051-199	3651
56	NORTHWESTERN UNIV	C E WADE	ARC	F W TUREK	NAG 2-774	3780
56	NORTHWESTERN UNIV	V THORNE	HQ	B W PETERSON	NAGW 4008	3811
56	UNIV OF KENTUCKY	F M SULZMAN	HQ	C F KNAPP	NAGW 3786	4293
56	UNIV OF LOUISVILLE	C F SAMS	JSC	G SONNENFELD	NAG 9-617	4302
56	UNIV OF LOUISVILLE	D GOLDWATER	ARC	G SONNENFELD	NCA 2-574	4305
56	LA ST U&A&M COL-BRGE	H LANE	JSC	G A BRAY	NAG 9-714	4316
56	LA STATE U-SHREVEPT	D L HARM	JSC	J J STEWART	NAG 9-167	4343
56	TULANE UNIVERSITY	L I HOCHSTEIN	ARC	E J JOHNSON	NCA 2-660	4364
56	JOHNS HOPKINS UNIV	M D ROSS	ARC	G M MCKHANN	NAG 2-935	4400
56	JOHNS HOPKINS UNIV	J K ALEXANDER	HQ	M J SHELHAMER	NAGW 2874	4462
56	BRANDEIS UNIVERSITY	D L HARM	JSC	J LACKNER	NAG 9-515	4770
56	HARVARD UNIVERSITY	A R HARGENS	ARC	S F VATNER	NCC 2-875	4829
56	HARVARD UNIVERSITY	S GOLDSTEIN	JSC	D INGBER	NGT 00-050-874	4847
56	MASS INST OF TECH	F M SULZMAN	HQ	L R YOUNG	NAGW 3958	5034
56	UNIV MICH-ANN ARBOR	L PUTCHA	JSC	G L AMIDON	NAG 9-465	5254
56	U MINN-MNPLS-ST PAUL	F C OWENS	HQ	A BEITZ	NGT 00-050-563	5423
56	ST LOUIS UNIVERSITY	R WHITE	HQ	N C PARTRIDGE	NGT 00-051-145	5481
56	UNIV MO-COLUMBIA	R JUDAY	JSC	J KNAPP	NAG 9-711	5493
56	MONTANA STATE UNIV	R L SAUER	JSC	G A MCFETERS	NAG 9-505	5560
56	PRINCETON UNIVERSITY	R WHITE	HQ	C GROSS	NGT 00-051-140	5780
56	U OF MED&DEN OF NJ	R BILICA	JSC	J SIEGEL	NAG 9-567	5816
56	U OF MED&DEN OF NJ	K NEWKIRK	JSC	P STEIN	NAS 9-17276	5817
56	UNIV OF NEW MEXICO	S M FORTNEY	JSC	M L RIEDESEL	NAG 9-401	5882
56	COLUMBIA UNIVERSITY	D MORRISON	JSC	B V WORGUL	NAG 9-529	5957
56	UNIV OF ROCHESTER	D L TOMKO	ARC	G D PAIGE	NCA 2-618	6317
56	YESHIVA UNIVERSITY	D L PIERSON	JSC	H D ISENBERT	NAG 9-573	6323
56	DUKE UNIVERSITY	M R POWELL	JSC	R D VANN	NAG 9-134	6332
56	MIAMI UNIVERSITY	F KUTYNA	JSC	D E PARKER	NAG 9-446	6655
56	LINCOLN UNIV-PA	G E ALCORN	GSFC	FRANKOWSKI	NAS 5-28566	7039
56	PA ST U-HERSHEY MED	F A KUTYNA	JSC	K KOCH	NAG 9-118	7041
56	PA ST U-HERSHEY MED	D K RUSSELL	HQ	W SEVERS	NGT 00-070-327	7042
56	PENN STATE U-UNIV PK	F M SULZMAN	HQ	J A FRANGOS	NAGW 3853	7153
56	UNIV OF PENNSYLVANIA	J M WALIGORA	JSC	C J LAMBERTSEN	NAG 9-597	7208
56	UNIV OF PENNSYLVANIA	R J WHITE	HQ	C J LAMBERTSEN	NAGW 3628	7211
56	UNIV OF PENNSYLVANIA	J R GOODIN	KSC	N I BODLER	NAG10-122	7212
56	BENEDICT COLLEGE	F SIX	MSFC	L LOWE	NAG 8-259	7330
56	CLEMSON UNIV-CLEMSON	F H FARMER	LARC	S W SHALSBY	NCC 1-182	7353
56	MEHARRY MEDICAL COL	D K RUSSELL	HQ	S E ADUNYAH	NGT 00-070-388	7400
56	VANDERBILT UNIVERSTY	P A WHITSON	JSC	D ROBERTSON	NAG 9-563	7467
56	VANDERBILT UNIVERSTY	R H OTT	HQ	T G WANG	NAGW 1707	7468
56	VANDERBILT UNIVERSTY	F M SULZMAN	HQ	I BIAGGIONI	NAGW 3854	7474
56	VANDERBILT UNIVERSTY	F M SULZMAN	HQ	D ROBERTSON	NAGW 3873	7475
56	VANDERBILT UNIVERSTY	S SAWYER	JSC	D ROBERTSON	NAS 9-19196	7476
56	VANDERBILT UNIVERSTY	J VERNIKOS	ARC	D M ROBERTSON	NCC 2-696	7477
56	BAYLOR COL OF MED	V SCHNEIDER	JSC	A LEBLANC	NAG 9-130	7489
56	BAYLOR COL OF MED	H LANE	JSC	C ALFREY	NAS 9-14662	7491
56	BAYLOR COL OF MED	F BOOKER	JSC	C P ALFREY	NAS 9-18024	7492
56	BAYLOR COL OF MED	D MORRISON	JSC	M Z ATASSI	NAS 9-18065	7493
56	BAYLOR COL OF MED	A L PLAZA	JSC	A D LEBLANC	NAS 9-18952	7494
56	BAYLOR COL OF MED	R J BOZEMAN	JSC	M E DEBAKEY	NCC 9-23	7495
56	BAYLOR UNIVERSITY	L TAGGART	JSC	A LEBLANC	NAG 9-708	7496
56	TEXAS COL OSTEO MED	S M FORTNEY	JSC	P B RAVEN	NAG 9-611	7693

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
56	TEXAS COL OSTEO MED	F C OWENS	HQ	P B RAVEN	NGT 00-050-751	7694
56	TEXAS WOMANS UNIV	B WOOLFORD	JSC	S M HASSON	NAG 9-579	7712
56	UNIV HOUSTON	R JUDAY	JSC	D S LOSHIN	NAG 9-516	7721
56	U TEX MED BRANCH-GAL	R SAUER	JSC	C A STUART	NAG 9-581	7761
56	U TEX MED BRANCH-GAL	F M SULZMAN	HQ	C A STUART	NAGW 4032	7762
56	U TEX MED BRANCH-GAL	F C OWENS	HQ	R M DENNEY	NGT 00-050-736	7764
56	U TEX MED BRANCH-GAL	F C OWENS	HQ	A A PERACHIO	NGT 00-050-748	7765
56	U TEX HLTH SC CTR-SA	G SPAULDING	JSC	M P MOYER	NAG 9-687	7767
56	U TEX SW MED CTR-DA	P A WHITSON	JSC	C Y PAK	NAG 9-152	7778
56	U TEX SW MED CTR-DA	S M FORTNEY	JSC	J C BUCKEY	NAG 9-492	7779
56	U TEX SW MED CTR-DA	R J WHITE	HQ	C G BLOMQVIST	NAGW 3582	7780
56	U TEX SW MED CTR-DA	W YOUNG	JSC	G BLOMQVIST	NAS 9-16044	7781
56	U TEX SW MED CTR-DA	C M BUNTIN	JSC	G BLOMQVIST	NAS 9-18139	7782
56	U TEX SW MED CTR-DA	J CARDENAS	JSC	J BUCKEY	NAS 9-19190	7783
56	U TEX SW MED CTR-DA	S SAWYER	JSC	G BLOMQVIST	NAS 9-19203	7784
56	U TX ANDERSON CANCER	G SPAULDING	JSC	N R PELLIS	NAG 9-664	7785
56	U TEX HLTH SC CTR-HU	R E GRINDELAND	ARC	F W BOOTH	NAG 2-239	7786
56	U TEX HLTH SC CTR-HU	J M WALIGORA	JSC	B D BUTLER	NAG 9-215	7787
56	U TEX HLTH SC CTR-HU	S POOL	JSC	V SCHNEIDER	NAG 9-335	7788
56	U TEX HLTH SC CTR-HU	F A KUTYNA	JSC	J DEFRANCE	NAG 9-413	7789
56	U TEX HLTH SC CTR-HU	T T GOODWIN	JSC	P C JOHNSON	NAG 9-688	7790
56	U TEX HLTH SC CTR-HU	M POWELL	JSC	B BUTLER	NCC 9-20	7795
56	U TEX HLTH SC CTR-HU	J ALEXANDER	HQ	B D BUTLER	NGT 00-050-900	7796
56	UNIV TEXAS-AUSTIN	G KLUTE	JSC	R E BARR	NAG 9-588	7852
56	VIRGINIA COMNWLTH U	J SAMOS	LARC	J L PATTERSON	NAG 1-695	8407
56	UNIV OF WASHINGTON	D L HARM	JSC	D E PARKER	NAG 9-703	8459
56	WASHINGTON ST UNIV	V SCHNEIDER	JSC	P D GOLLNICK	NAG 9-363	8568
56	WEST VIRGINIA UNIV	R E GRINDELAND	ARC	W T STAUBER	NAG 2-590	8586
56	MARQUETTE UNIVERSITY	C M WINGET	ARC	R H FITTS	NAG 2-636	8610
56	UNIV WISC-MADISON	R E GRINDELAND	ARC	A C VAILAS	NAG 2-568	8624
59	ALABAMA A&M UNIV	J L RANDALL	MSFC	R KALE	NAG 8-97	1002
59	UNIV OF ARIZONA	A R HARGERS	ARC	C M TIPTON	NAG 2-392	1357
59	UNIV OF ARIZONA	R WHITE	HQ	C M TIPTON	NGT 00-051-092	1551
59	SAN FRAN STATE UNIV	G C CARLE	ARC	J B ORENBERG	NCC 2-672	1797
59	SAN FRAN STATE UNIV	J B POLLACK	ARC	J MONTEVERDI	NCC 2-727	1798
59	SAN FRAN STATE UNIV	G C CARLE	ARC	J B ORENBERG	NCC 2-808	1799
59	UNIV CALIF-DAVIS	S B ARNAUD	ARC	R B MARTIN	NAG 2-649	2236
59	UNIV CALIF-DAVIS	S M HING	ARC	C A FULLER	NAG 2-795	2239
59	UNIV CALIF-DAVIS	J HINES	ARC	R L SMITH	NCC 2-5054	2289
59	UNIV CALIF-L ANGELES	A R HARGENS	ARC	P S COWINGS	NCC 2-804	2473
59	UNIV CALIF-SAN DIEGO	R J WHITE	HQ	S L MILLER	NAGW 2881	2565
59	UNIV CALIF-SAN DIEGO	C M BUNTIN	JSC	J B WEST	NAS 9-16037	2592
59	UNIV CALIF-SAN DIEGO	V ELLERBE	JSC	J B WEST	NAS 9-18764	2593
59	UNIV CALIF-SAN FRAN	K E NEWKIRK	JSC	C D ARMAUD	NAS 9-16227	2620
59	COLORADO STATE UNIV	K NEWKIRK	JSC	M J FETTMAN	NAS 9-18735	2792
59	U COL HLTH SCI CTR	J H STOKLOSA	HQ	R T MEEHAN	NAGW 3850	2807
59	UNIV COLORADO-BOLDR	W A ORAN	HQ	M LUTTGES	NAGW 1197	2941
59	GEORGE WASHINGTON U	F SULZMAN	HQ	J LOGSDON	NAGW 2498	3220
59	GEORGE WASHINGTON U	M SHEPANER	HQ	F R DUTCHER	NASW 4324	3223
59	FLORIDA A&M UNIV	M MARGOLIS	HQ	K REDDA	NGT10-40900	3302
59	UNIV OF FLORIDA	W M KNOTT	KSC	R A YOST	NAG10-102	3431
59	UNIV OF SO FLORIDA	D K RUSSELL	HQ	D V LIM	NGT 00-070-375	3499
59	UNIV OF CHICAGO	I D BROWNE	JSC	S R SUTTON	NAG 9-106	3860
59	PURDUE UNIVERSITY	R J WHITE	HQ	C A MITCHELL	NAGW 2329	4078
59	KANSAS STATE UNIV	W M KNOTT	KSC	J A GUIKEMA	NAG10-142	4243
59	LA ST U&A&M COL-BRGE	J HINES	ARC	M C MURPHY	NCC 2-5055	4331
59	TULANE UNIVERSITY	S GOLDSTEIN	JSC	F FIGUEROA	NAG 9-720	4361
59	TULANE UNIVERSITY	T W HALSTEAD	HQ	C D FERMIN	NAGW 1516	4363
59	JOHNS HOPKINS UNIV	J K ALEXANDER	HQ	L SCHULTHEIS	NAGW 3056	4466
59	UNIV MARYLAND-BALT	R J WHITE	HQ	W P COLEMAN	NAGW 2649	4516

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
59	MASS INST OF TECH	R J WHITE	HQ	R J COHEN	NAGW 3927	5031
59	MASS INST OF TECH	M BUNTIN	JSC	L R YOUNG	NAS 9-16523	5049
59	MASS INST OF TECH	K NEWKIRK	JSC	L R YOUNG	NAS 9-18734	5051
59	GRAND VALLEY ST UNI	F SIX	MSFC	W A CHREN	NAG 8-226	5159
59	U OF MED&DEN OF NJ	J VILLARREAL	JSC	T P STEIN	NAS 9-18775	5818
59	COLUMBIA UNIVERSITY	T HALSTEAD	HQ	D J WOLGEMUTH	NAGW 1579	5961
59	CORNELL UNIVERSITY	M M AVERNER	HQ	S A LEVIN	NAGW 2938	6075
59	MT SINAI SCH OF MED	J P CONNOLLY	ARC	B COHEN	NAG 2-573	6126
59	STATE UNIV NY-ALBANY	C M BUNTIN	JSC	L FARHI	NAS 9-16042	6216
59	STATE UNIV NY-ALBANY	G C CARLE	ARC	T W SCATTERGOOD	NCC 2-395	6217
59	STATE U NY-STONY BRK	T HALSTEAD	HQ	A D KRIKORIAN	NAGW 1529	6265
59	UNIV OF ROCHESTER	R J WHITE	HQ	T W CLARKSON	NAGW 2356	6313
59	EAST CAROLINA UNIV	J H STOKLOSA	HQ	D M TERRIAN	NAGW 2927	6348
59	UNIV N CAR-CHPL HILL	W M KNOTT	KSC	T SCOTT	NAG10-144	6445
59	OHIO STATE UNIV	J L GOODING	JSC	P K GALLAGER	NAG 9-707	6697
59	OHIO STATE UNIV	J M ORASANU	ARC	P J SMITH	NCC 2-830	6719
59	OHIO UNIVERSITY	J M ORASANU	ARC	C E MCCOY	NCC 2-827	6737
59	WRIGHT STATE UNIV	F D EVANS	HQ	S MOHLER	NGT36-24790	6885
59	OR.GRAD INST SCI&TEC	L S STONE	HQ	M PAVEL	NAG 2-931	6911
59	DREXEL UNIVERSITY	R A SCHIFFER	HQ	D R BROOKE	NAGW 3738	7024
59	TEXAS SOUTHERN UNIV	C T BOURLAND	JSC	S M AHMED	NAG 9-325	7697
59	TEXAS WOMANS UNIV	J MAIDA	JSC	S HASSON	NAG 9-738	7713
59	UNIV HOUSTON	G R COULTER	HQ	I WOLINSKY	NAGW 3191	7745
59	UNIV HOUSTON	R E GRINDELAND	ARC	S B ARNAUD	NCC 2-801	7747
59	U TEX HLTH SC CTR-HU	P DYAL	ARC	V S SCHNEIDER	NCC 2-8001	7794
59	UNIV TEXAS-AUSTIN	J H STOKLOSA	HQ	R L HELMREICH	NAGW 3781	7890
59	UNIV TEXAS-DALLAS	K NEWKIRK	JSC	J BUCKEY	NAS 9-18736	7952
59	UNIV OF UTAH	R D MACELROY	ARC	J S LIGHTLY	NCC 2-851	8009
59	UTAH STATE UNIV	W BERRY	ARC	B BUGBEE	NCA 2-662	8036
59	VIRGINIA COMNWLT U	W J YOUNG	JSC	D L ECKBERG	NAS 9-16046	8410
59	WASHINGTON ST UNIV	R SAUER	JSC	R J BULL	NAG 9-545	8569
59	MARSHALL UNIVERSITY	F SULZMAN	HQ	G A DUDLEY	NAGW 3435	8581
59	MARQUETTE UNIVERSITY	V ELLERBEE	JSC	R H FITTS	NAS 9-18768	8615
59	UNIV WISC-MADISON	D S MCKAY	JSC	N A DUFFIE	NAG 9-615	8678
59	UNIV. OF WAIKATO	L S STONE	ARC	J A PERRONE	NAGW 4127	8838
61	SO ILL UNIV-CARBONDL	G LESANE	HQ	D L MOLFESE	NGT 00-051-366	3833
61	UNIV MO-COLUMBIA	T W HALSTEAD	HQ	T JONES	NAGW 3910	5496
61	NEW YORK UNIVERSITY	A AHUMADA	ARC	M PAVEL	NCA 2-587	6137
61	VILLANOVA UNIVERSITY	R REMINGTON	ARC	C L FOLK	NCA 2-797	7257
61	BROWN UNIVERSITY	B KANKI	ARC	P LIEBERMAN	NCA 2-796	7293
62	UNIV OF ARIZONA	B KANKI	ARC	S CONLEY	NCA 2-783	1522
62	UNIV CALIF-SAN DIEGO	L TOBIAS	ARC	E L HUTCHINS	NAG 2-873	2504
62	UNIV CALIF-SAN DIEGO	E A PALMER	ARC	D A NORMAN	NCC 2-591	2597
62	UNIV OF SOUTHERN CAL	B G KANKI	ARC	J C TAYLOR	NCC 2-812	2749
62	NORTHWESTERN UNIV	B G KANKI	ARC	M T PALMER	NCC 2-773	3817
62	SO ILL U-EDWRDSVILLE	E A PALMER	ARC	L J SKITKA	NCC 2-837	3835
62	UNIV ILLINOIS-URBANA	B G KANKI	ARC	C D WICKENS	NCA 2-616	3987
62	OHIO STATE UNIV	L EVANS	LARC	T E NYGREN	NGT 00-051-255	6729
62	UNIV TEXAS-AUSTIN	B G KANKI	ARC	R L HELMREICH	NCC 2-286	7901
69	CAL STATE U-HAYWARD	M M COHEN	ARC	A E STOPER	NCC 2-529	1743
69	SAN JOSE STATE UNIV	R K DISMUKES	ARC	K JORDAN	NCC 2-327	1836
69	SAN JOSE STATE UNIV	R K DISMUKES	ARC	K P JORDAN	NCC 2-798	1847
69	STANFORD UNIVERSITY	A J AHUMADA	ARC	B A WANDELL	NCC 2-307	1975
69	UNIV CALIF-BERKELEY	R B WELCH	ARC	L STARK	NCC 2-757	2187
69	UNIV CALIF-DAVIS	S M CASNER	ARC	R A HESS	NCC 2-819	2278
69	UNIV CALIF-L ANGELES	R COMSTOCK	LARC	M B STERMAN	NAG 1-1068	2342
69	UNIV CALIF-L ANGELES	L C SHELTER	ARC	R GELMAN	NCC 2-826	2474
69	UNIV CALIF-S CRUZ	M K KAISER	ARC	B BRIDGEMAN	NCC 2-814	2695
69	UNIV COLORADO-BOLDR	M T PALMER	LARC	P G POLSON	NAG 1-1581	2821
69	CATHOLIC UNIVERSITY	A T POPE	LARC	R PARASURAMAN	NAG 1-1296	3255

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
69	UNIV OF MIAMI	E A PALMER	ARC	E L WIENER	NCC 2-843	3476
69	GEORGIA INST OF TECH	R J SHIVELY	ARC	A KIRLIK	NAG 2-656	3531
69	UNIV ILLINOIS-URBANA	S G HART	ARC	C D WICKENS	NAG 2-308	3936
69	UNIV ILLINOIS-URBANA	S G HART	ARC	P M SANDERSON	NAG 2-738	3938
69	UNIV ILLINOIS-URBANA	D C FOYLE	ARC	C D WICKENS	NAG 2-886	3943
69	UNIFORMED SERVS UNIV	F C OWENS	HQ	N E GRUNBERG	NGT 00-050-611	4514
69	HARVARD UNIVERSITY	A T POPE	LARC	E J LANGER	NAG 1-1345	4779
69	MASS INST OF TECH	K M CORKER	ARC	T B SHERIDAN	NAG 2-729	4880
69	MASS INST OF TECH	E M WENZEL	ARC	N I PURLACH	NCC 2-771	5058
69	NEW YORK UNIVERSITY	A T POPE	LARC	E R JOHN	NAG 1-1448	6131
69	STATE UNIV NY-BUFFAL	K H ABBOTT	LARC	V L SHALIN	NAG 1-1342	6228
69	OHIO STATE UNIV	J V LEBACQZ	ARC	C E BILLINGS	NAG 2-810	6661
69	OR.GRAD INST SCI&TEC	A J AHUMADA	ARC	M PAVEL	NCC 2-811	6912
69	OREGON STATE UNIV	K M CORKER	ARC	K H FUNK II	NAG 2-875	6919
69	PENN STATE U-UNIV PK	A T POPE	LARC	M J RAY	NAG 1-1441	7055
69	PENN STATE U-UNIV PK	E PRIOR	LARC	W J RAY	NGT 00-070-299	7200
69	BROWN UNIVERSITY	B KANKI	ARC	P LIEBERMAN	NCC 2-5041	7294
69	UNIV HOUSTON	R T SAVELY	JSC	D S JOHNSON	NAG 9-555	7725
69	UNIV OF UTAH	B KANKI	ARC	R DECKER	NCC 2-5007	8010
69	COLLEGE OF WM & MARY	A T POPE	LARC	P L DERKS	NCC 1-160	8081
69	GEORGE MASON UNIV	J R BURLEY	LARC	D LITTMAN	NAG 1-1425	8091
69	OLD DOMINION UNIV	A T POPE	LARC	F G FREEMAN	NCC 1-176	8179
69	OLD DOMINION UNIV	E PRIOR	LARC	G COATES	NGT 00-050-986	8185
69	UNIV OF VIRGINIA	M K KAISER	ARC	D PROFFITT	NCA 2-708	8262
69	UNIV OF VIRGINIA	M K KAISER	ARC	D R	NCC 2-5074	8267
69	VIRGINIA POLY INST	A T POPE	LARC	H J CRAWFORD	NAG 1-1621	8354
69	UNIV WISC-MADISON	E M WENZEL	ARC	F L WIGHTMAN	NCC 2-542	8738
69	ISRAEL INST OF TECH	S G HART	HQ	D GOPHER	NAGW 1128	8832
69	UNIV OF CANTERBURY	W W JOHNSON	ARC	D OWEN	NAGW 2170	8837
72	UNIV SO CAROLINA-COL	C L HILL	SSC	D J COWEN	NAS13-449	7373
73	AUBURN UNIV-AUBURN	D K RUSSELL	HQ	J R HANSEN	NGT 00-070-398	1046
73	AMERICAN UNIVERSITY	R D LAUNIUS	HQ	H MC CURDY	NASW 4798	3251
75	OREGON STATE UNIV	D K RUSSELL	HQ	D BELLA	NGT 00-070-400	6961
76	NM HIGHLANDS UNIV	D RUSSELL	HQ	G SANCHEZ	NGT 00-090-237	5823
76	PENN STATE U-UNIV PK	D GALLAWAY	HQ	M K HEID	NGT 00-051-010	7186
76	TEXAS SOUTHERN UNIV	G JOHNSON	JSC	W W BARNETT	NAG 9-456	7699
79	NEW MEX ST U-LAS CR	D RUSSELL	HQ	V GHOO	NGT 00-070-341	5864
79	CASE WESTERN RESERVE	R L REAMES	LERC	D A KOLB	NCC 3-90	6515
79	TEX A&M U-KINGSVILLE	L M ARMENDARIZ	JSC	J L KIMBALL	NAG 9-682	7692
79	UNIV OF VIRGINIA	D K RUSSELL	HQ	D BALL	NGT 00-070-365	8307
79	VIRGINIA POLY INST	P BACON	HQ	J LAPORTE	NGT 00-050-988	8385
79	VIRGINIA POLY INST	P BACON	HQ	J LAPORTE	NGT 00-051-278	8391
99	AUBURN UNIV-AUBURN	L J SMITH	MSFC	J OWEN	NAS 8-39131	1033
99	OAKWOOD COLLEGE	D RUSSELL	HQ	E A COOPER	NGT 00-090-073	1050
99	TRENHOLM ST TECH COL	P J SAKIMOTO	HQ	S C KAUSHNIK	NAGW 4089	1052
99	TUSKEGEE UNIVERSITY	S E MASSENBERG	HQ	W A HILL	NAGW 2940	1061
99	TUSKEGEE UNIVERSITY	S STOVALL-ALEXANDER	HQ	S JEELANI	NAGW 3472	1062
99	UNIV ALA-HUNTSVILLE	C R CHAPPELL	MSFC	A H YELLE	NAG 8-178	1098
99	UNIV ALA-HUNTSVILLE	L J SMITH	MSFC	W W VAUGHN	NAS 8-36955	1149
99	UNIV ALA-HUNTSVILLE	L J SMITH	MSFC	W W VAUGHAN	NAS 8-38609	1154
99	UNIV ALA-HUNTSVILLE	J R RICHARDSON	MSFC	B J SCHROER	NCC 8-18	1162
99	UNIV ALA-HUNTSVILLE	A S MCGEE	HQ	J GREGORY	NCCW 57	1168
99	UNIV ALA-HUNTSVILLE	E T SCHWARTZ	HQ	C A LUNDQUIST	NGT 00-040-010	1169
99	UNIV ALA-HUNTSVILLE	D K RUSSELL	HQ	J GIBSON	NGT 00-090-120	1185
99	UNIV ALA-TUSCALOOSA	D GALLAWAY	HQ	D W SUNAI	NAGW 3072	1209
99	UNIV ALA-TUSCALOOSA	D K RUSSELL	HQ	G SINGLETON	NGT 00-090-224	1219
99	UNIV ALASKA-ANCHORAG	J ROOT	HQ	J FREDERICKS	NCCW 42	1222
99	UNIV ALASKA-FAIRBNKS	E T SCHWARTZ	HQ	J G HAWKINS	NGT 00-040-022	1264
99	NAVAJO COMMUNITY COL	B WHITE	HQ	T GORMAN-KEITH	NAGW 2732	1336
99	NORTHERN ARIZONA U	B L WHITE	HQ	A TANAKEYOWMA	NAGW 3906	1346

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
99	UNIV OF ARIZONA	A J TUYAHOV	HQ	P SLATER	NAGW 896	1415
99	UNIV OF ARIZONA	G ASRAR	HQ	J A REAGAN	NGT 00-030-215	1535
99	UNIV OF ARIZONA	E T SCHWARTZ	HQ	E LEVY	NGT 00-040-006	1536
99	UNIV ARKANSAS-LTL RK	A S MCGEE	HQ	G NORTHROP	NCCW 55	1581
99	UNIV ARKANSAS-LTL RK	E T SCHWARTZ	HQ	G M NORTHROP	NGT 00-040-036	1582
99	CALIF INST OF TECH	D J RUSSELL	HQ	J HOPEFIELD	NGT 00-070-335	1715
99	CALIF INST OF TECH	D K RUSSELL	HQ	E ZUKOSKIN	NGT 00-090-175	1717
99	CAL STATE U-CHICO	D CONRAD	LERC	J WRIGHT	NAS 3-26127	1745
99	CAL STATE U-NRTHRDGE	D K RUSSELL	HQ	S OPPENHEIMER	NGT 00-090-111	1765
99	CAL STATE U-SACRAMEN	D RUSSELL	HQ	A STRIPLEN	NGT 00-090-227	1766
99	D-Q UNIVERSITY	A HATCH	ARC	A LOUFAS	NAGW 3335	1769
99	FOOTHILL COLLEGE	M LANE	ARC	M CONWAY	NCA 2-724	1771
99	FOOTHILL-DEANZA SYST	M A LANE	ARC	M CONWAY	NGT 2-1001	1773
99	FOOTHILL-DEANZA SYST	S S LONGCHAMPS	ARC	M CONWAY	NGT 2-1002	1774
99	LOYOLA MARYMOUNT U	F SIX	MSFC	J SANNY	NAG 8-275	1778
99	NAT'L HISPANIC UNIV	E BUGNA	ARC	R PARKER	NGT 00-090-067	1779
99	SAN JOSE STATE UNIV	S STANLEY	ARC	R SHOEMAKER	NCA 2-178	1812
99	SAN JOSE STATE UNIV	R L PIKE	ARC	N BUSSANI	NCA 2-295	1813
99	SAN JOSE STATE UNIV	L A MILOV	ARC	S K GIBSON	NCA 2-555	1814
99	SAN JOSE STATE UNIV	T B CLAUSEN	ARC	J BEARD	NCA 2-756	1824
99	STANFORD UNIVERSITY	D K RUSSELL	HQ	N LOZANO	NGT 00-090-112	2046
99	STANFORD UNIVERSITY	D K RUSSELL	HQ	N LOZANO	NGT 00-090-222	2047
99	UNIV CALIF-BERKELEY	H W JONES	ARC	F SHU	NCC 2-36	2181
99	UNIV CALIF-BERKELEY	S R ELLIS	ARC	L STARK	NCC 2-86	2182
99	UNIV CALIF-BERKELEY	B WHITE	HQ	M DIAMOND	NGT 00-090-039	2233
99	UNIV CALIF-DAVIS	D K RUSSELL	HQ	R CRIDDLE	NGT 00-090-152	2300
99	UNIV CALIF-DAVIS	D K RUSSELL	HQ	R CRIDDLE	NGT 00-090-153	2301
99	UNIV CALIF-DAVIS	D K RUSSELL	HQ	R CRIDDLE	NGT 00-090-240	2302
99	UNIV CALIF-IRVINE	D RUSSELL	HQ	F HERMES	NGT 00-090-071	2339
99	UNIV CALIF-IRVINE	D K RUSSELL	HQ	F HERMES	NGT 00-090-173	2340
99	UNIV CALIF-SAN DIEGO	G CLAYTON	HQ	G R BURBIDGE	NAGW 1737	2545
99	UNIV CALIF-SAN DIEGO	E T SCHWARTZ	HQ	J ARNOLD	NGT 00-040-005	2605
99	UNIV CALIF-S BARBARA	A J TUYAHOV	HQ	J E ESTES	NAGW 1743	2637
99	UNIV CALIF-S CRUZ	D K RUSSELL	HQ	R E SLATER	NGT 00-090-178	2703
99	UNIV OF SOUTHERN CAL	F E PENARANDA	HQ	R STARK	NASW 4680	2745
99	UNIV OF SOUTHERN CAL	G ASRAR	HQ	T DICKEY	NGT 00-030-180	2752
99	UNIV OF SOUTHERN CAL	D K RUSSELL	HQ	L YATES	NGT 00-090-142	2755
99	UNIV OF SOUTHERN CAL	D K RUSSELL	HQ	L YATES	NGT 00-090-171	2756
99	COLORADO STATE UNIV	K A SOUZA	ARC	G R COULTER	NCC 2-877	2793
99	UNIV COLORADO-BOLDR	J W KIERIER	HQ	R BYERLY	NAGW 1105	2937
99	UNIV COLORADO-BOLDR	M V PHELPS	HQ	J BENNETT	NAGW 3868	3016
99	UNIV COLORADO-BOLDR	E T SCHWARTZ	HQ	E R HANSEN	NGT 00-040-008	3067
99	UNIV OF HARTFORD	F SIX	MSFC	L NAGURNEY	NAG 8-274	3148
99	UNIV OF HARTFORD	E T SCHWARTZ	HQ	A L PIERCE	NGT 00-040-037	3149
99	YALE UNIVERSITY	C M LEE	LERC	L D PFETTERLE	NAG 3-996	3152
99	YALE UNIVERSITY	D K RUSSELL	HQ	R WEBER	NGT 00-090-113	3179
99	UNIV OF DELAWARE	G ASRAR	HQ	J S GREENE	NGT 00-030-098	3199
99	UNIV OF DELAWARE	E T SCHWARTZ	HQ	N F NESS	NGT 00-040-023	3201
99	GALLAUDET COLLEGE	D RUSSELL	HQ	G MCGAUGHRAN	NGT 00-090-057	3207
99	GALLAUDET COLLEGE	D RUSSELL	HQ	A NISSEN	NGT 00-090-074	3208
99	GALLAUDET COLLEGE	D RUSSELL	HQ	G MCGAUGHRAN	NGT 00-090-075	3209
99	GALLAUDET COLLEGE	D K RUSSELL	HQ	G MCGAUGHRAN	NGT 00-090-182	3210
99	GEORGETOWN UNIV	S G TILFORD	HQ	R A SCRIBNER	NAGW 3202	3232
99	HOWARD UNIVERSITY	D MENCHAN	GSFC	M C WOODARD	NCA 5-107	3245
99	HOWARD UNIVERSITY	D V GALLAWAY	HQ	M W THOMPSON	NGT 00-010-002	3246
99	HOWARD UNIVERSITY	E T SCHWARTZ	HQ	J B HALPERN	NGT 00-040-024	3247
99	HOWARD UNIVERSITY	A S MCGEE	HQ	D N FAN	NGT 9-11060	3249
99	UNIV DIST COLUMBIA	M S MARGOLIS	HQ	W R COLEMAN	NAGW 2216	3276
99	BETHUNE-COOKMAN COL	F SIX	MSFC	S A RAHMANI	NAG 8-991	3277
99	BREVARD COMM COLLEGE	B MARTIN	KSC	D L PULKET	NAG10-114	3278

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
99	EDWARD WATERS COL	B WHITE	HQ	N SUNDURLINGAM	NAGW 3992	3280
99	EMBRY-RIDDLE AERO U	T M WALSH	LARC	J A WISE	NAG 1-1593	3281
99	FLA INTERNATIONAL U	A KAHN	HQ	M A EBADIAN	NCCW 44	3289
99	FLA INTERNATIONAL U	D K RUSSELL	HQ	J NAVLAKHA	NGT 00-090-147	3290
99	FLA INTERNATIONAL U	D K RUSSELL	HQ	J NAVLAKHA	NGT 00-090-148	3291
99	FLORIDA A&M UNIV	S E MASSENBERG	HQ	J A JOHNSON	NAGW 2930	3297
99	FLORIDA A&M UNIV	D K RUSSELL	HQ	E R TOSSIE	NGT 00-090-107	3300
99	FLORIDA A&M UNIV	D K RUSSELL	HQ	E R TOSSIE	NGT 00-090-181	3301
99	FLORIDA ATLANTIC U	V CEVENINI	HQ	W GLENN	NAGW 2778	3311
99	FLORIDA ATLANTIC U	P ELFREY	KSC	E SKELLINGS	NAG10-108	3314
99	FLORIDA ATLANTIC U	R CAIMI	KSC	Y K LIN	NCC10-5	3316
99	FLORIDA STATE UNIV	D K RUSSELL	HQ	T J HARRISON	NGT 00-090-108	3368
99	UNIV OF CENTRAL FLA	N E SILWG	KSC	J M RAGUSA	NAG10-115	3375
99	UNIV OF CENTRAL FLA	T S BARTH	KSC	W W SWART	NAG10-118	3378
99	UNIV OF CENTRAL FLA	J S BARTH	KSC	W W SWART	NAG10-119	3379
99	UNIV OF CENTRAL FLA	C DELAUNE	KSC	F GOMEZ	NAG10-120	3380
99	UNIV OF CENTRAL FLA	T DAVIS	KSC	S L RICE	NCC10-3	3388
99	UNIV OF CENTRAL FLA	D K RUSSELL	HQ	J A SMITH	NGT 00-090-121	3393
99	UNIV OF CENTRAL FLA	D K RUSSELL	HQ	J SMITH	NGT 00-090-122	3394
99	UNIV OF CENTRAL FLA	D K RUSSELL	HQ	J SMITH	NGT 00-090-170	3396
99	UNIV OF FLORIDA	E RHODES	KSC	J DUFFY	NAG10-109	3432
99	UNIV OF FLORIDA	F E PENARANDA	HQ	J R THORNTON	NASW 4676	3437
99	UNIV OF FLORIDA	E T SCHWARTZ	HQ	M A ELSENBERG	NGT 00-040-015	3445
99	UNIV OF MIAMI	D K RUSSELL	HQ	K Y FUNG	NGT 00-090-230	3479
99	UNIV OF SO FLORIDA	J K O MALLEY	KSC	R A CRANE	NAG10-76	3490
99	UNIV OF SO FLORIDA	D K RUSSELL	HQ	J O'SHIELDS	NGT 00-090-103	3502
99	CLARK ATLANTA UNIV	M S MARGOLIS	HQ	E A MINTZ	NAGW 2939	3508
99	CLARK ATLANTA UNIV	D K RUSSELL	HQ	I JENKINS	NGT 00-090-238	3510
99	GEORGIA INST OF TECH	R BAUER	LERC	D HOWARD	NAS 3-27361	3574
99	GEORGIA INST OF TECH	E T SCHWARTZ	HQ	D A PETERS	NGT 00-040-013	3585
99	GEORGIA INST OF TECH	D K RUSSELL	HQ	M LIU	NGT 00-070-383	3608
99	GEORGIA INST OF TECH	D K RUSSELL	HQ	L R HOWARD	NGT 00-090-080	3609
99	GEORGIA INST OF TECH	D K RUSSELL	HQ	L R HOWARD	NGT 00-090-081	3610
99	GEORGIA INST OF TECH	D K RUSSELL	HQ	L R HOWARD	NGT 00-090-082	3611
99	GEORGIA INST OF TECH	D K RUSSELL	HQ	L HOWARD	NGT 00-090-167	3612
99	GEORGIA INST OF TECH	D RUSSELL	HQ	L HOWARD	NGT 00-090-199	3613
99	GEORGIA INST OF TECH	D K RUSSELL	HQ	L HOWARD	NGT 00-090-200	3614
99	GEORGIA INST OF TECH	D RUSSELL	HQ	L HOWARD	NGT 00-090-201	3615
99	GEORGIA INST OF TECH	D K RUSSELL	HQ	L HOWARD	NGT 00-090-202	3616
99	GEORGIA SOUTHWTN COL	F SIX	MSFC	J P MANKER	NAG 8-271	3618
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-072	3629
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-089	3630
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-090	3631
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-091	3632
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-092	3633
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-093	3634
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-094	3635
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-095	3636
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-096	3637
99	SPELMAN COLLEGE	D K RUSSELL	HQ	E FALCONER	NGT 00-090-185	3638
99	SPELMAN COLLEGE	D K RUSSELL	HQ	E FALCONER	NGT 00-090-186	3639
99	SPELMAN COLLEGE	D RUSSELL	HQ	E FALCONER	NGT 00-090-187	3640
99	UNIV OF HAWAII-MANOA	J MCGARRY	GSFC	D HALL	NAS 5-32354	3744
99	UNIV OF HAWAII-MANOA	E T SCHWARTZ	HQ	P MOUGINIS-MARK	NGT 00-040-020	3751
99	UNIV OF IDAHO	L KEFFER	HQ	T ARMSTRONG	NGT 00-040-038	3766
99	ILL INST OF TECH	D RUSSELL	HQ	J ORNELAS	NGT 00-090-076	3772
99	ILL INST OF TECH	D RUSSELL	HQ	J ORNELAS	NGT 00-090-077	3773
99	ILL INST OF TECH	D RUSSELL	HQ	J ORNELAS	NGT 00-090-078	3774
99	ILL INST OF TECH	D RUSSELL	HQ	J ORNELAS	NGT 00-090-079	3775
99	ILL INST OF TECH	D K RUSSELL	HQ	J ORNELAS	NGT 00-090-146	3776

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
99	ILL INST OF TECH	D RUSSELL	HQ	J ORNELAS	NGT 00-090-179	3777
99	ILLINOIS WESLEYAN U.	F SIX	MSFC	U	NAG 8-268	3778
99	PARKS COL OF ST LU U	F SIX	MSFC	C E MONFORT	NAG 8-267	3829
99	UNIV ILLINOIS-URBANA	M M CONNORS	ARC	E DOUCHIN	NAG 2-666	3937
99	UNIV ILLINOIS-URBANA	N LAL	GSFC	M FOLK	NCC 5-106	3993
99	UNIV ILLINOIS-URBANA	G ASRAR	HQ	J W WEATHERLY	NGT 00-030-112	3994
99	UNIV ILLINOIS-URBANA	E T SCHWARTZ	HQ	K R SIVIER	NGT 00-040-017	3995
99	UNIV ILLINOIS-URBANA	M S MARGOLIS	HQ	J E GRIVES	NGT 00-090-062	4008
99	UNIV ILLINOIS-URBANA	B L WHITE	HQ	J GIRVES	NGT 00-090-066	4009
99	EARLHAM COLLEGE	F SIX	MSFC	R HIRELY	NAG 8-266	4013
99	PURDUE UNIVERSITY	E T SCHWARTZ	HQ	A F GRANDT	NGT 00-040-025	4097
99	PURDUE UNIVERSITY	D K RUSSELL	HQ	M MARTINEZ	NGT 00-090-138	4115
99	DRAKE UNIVERSITY	F SIX	MSFC	A MARSTON	NAG 8-264	4143
99	IOWA STATE UNIV	E SCHWARTZ	HQ	W W SANDERS	NGT 00-040-018	4173
99	IOWA STATE UNIV	D K RUSSELL	HQ	A CAMPBELL	NGT 00-090-123	4186
99	UNIV OF KANSAS	E T SCHWARTZ	HQ	D R DOWNING	NGT 00-040-026	4272
99	CENTRE COLLEGE	F SIX	MSFC	J KIREKE	NAG 8-191	4285
99	UNIV OF KENTUCKY	E SCHWARTZ	HQ	R HACKNEY	NGT 00-040-049	4297
99	WESTRN KENTUCKY UNIV	A S MCGEE	HQ	R HACKNEY	NCCW 60	4308
99	LA ST U&A&M COL-BRGE	A S MCGEE	HQ	J P WEFEL	NCCW 59	4332
99	LA ST U&A&M COL-BRGE	E T SCHWARTZ	HQ	J P WEFEL	NGT 00-040-039	4334
99	LA ST U&A&M COL-BRGE	D K RUSSELL	HQ	A STERLING	NGT 00-090-197	4341
99	LA ST U&A&M COL-BRGE	D K RUSSELL	HQ	A STERLING	NGT 00-090-198	4342
99	LOUISIANA TECH UNIV	D RUSSELL	HQ	J NELSON	NGT 00-090-195	4344
99	LOUISIANA TECH UNIV	D RUSSELL	HQ	F AKI	NGT 00-090-196	4345
99	SO UNIV & A&M COL-BR	O A GUTIERREZ	HQ	R L FORD	NAGW 3041	4350
99	SO UNIV & A&M COL-BR	D K RUSSELL	HQ	D BAGAYOKO	NGT 00-090-118	4356
99	SO UNIV & A&M COL-BR	D K RUSSELL	HQ	D BAGAYOKO	NGT 00-090-119	4357
99	TULANE UNIVERSITY	D K RUSSELL	HQ	S SULLIVAN	NGT 00-090-223	4370
99	COPPIN STATE COLLEGE	B L WHITE	HQ	M E OWENS	NAGW 4101	4396
99	JOHNS HOPKINS UNIV	M E KICZA	HQ	S M KRIMIGIS	NAGW 4036	4485
99	JOHNS HOPKINS UNIV	E T SCHWARTZ	HQ	R C HENRY	NGT 00-040-004	4496
99	MORGAN STATE UNIV	B L WHITE	HQ	A A TEATE	NAGW 4093	4505
99	MORGAN STATE UNIV	D K RUSSELL	HQ	E DELOATCH	NGT 00-090-116	4509
99	MORGAN STATE UNIV	D K RUSSELL	HQ	E DELOATCH	NGT 00-090-117	4510
99	PRINCE GEO COM COL	D MENCHAN	GSFC	P A CUNNIFF	NGT 00-090-158	4512
99	UNIV MARYLAND-BALT	D K RUSSELL	HQ	E BAKER	NGT 00-090-137	4518
99	UNIV MARYLAND-BALT	R LANG	LARC	F HRABOYSKI	NGT 00-090-155	4519
99	UNIV MARYLAND-BALT	D K RUSSELL	HQ	E BAKER	NGT 00-090-180	4520
99	UNIV MARYLAND-COL PK	K BERGMAN	HQ	J SHUKLA	NAGW 2661	4637
99	UNIV MARYLAND-COL PK	V CEVENINI	HQ	J BARAS	NAGW 2777	4643
99	UNIV MARYLAND-COL PK	C B PILCHER	HQ	C S LIU	NAGW 4000	4669
99	UNIV MARYLAND-COL PK	M V PHELPS	HQ	R E LOPEZ	NAGW 4094	4673
99	UNIV MARYLAND-COL PK	J LANDERS	HQ	H J PAIK	NASW 4885	4683
99	UNIV MARYLAND-COL PK	D K RUSSELL	HQ	M C RABENHORST	NGT 00-070-321	4724
99	MASS INST OF TECH	J LANDERS	HQ	E F CRAWLEY	NASW 4886	5055
99	MASS INST OF TECH	E T SCHWARTZ	HQ	L R YOUNGNGS	NGT 00-040-001	5071
99	MASS INST OF TECH	D K RUSSELL	HQ	J JACKSON	NGT 00-090-149	5085
99	MASS INST OF TECH	D K RUSSELL	HQ	J JACKSON	NGT 00-090-208	5086
99	MASS INST OF TECH	D K RUSSELL	HQ	J JACKSON	NGT 00-090-209	5087
99	MASS INST OF TECH	D K RUSSELL	HQ	J JACKSON	NGT 00-090-210	5088
99	MASS INST OF TECH	D K RUSSELL	HQ	J JACKSON	NGT 00-090-211	5089
99	MASS INST OF TECH	D K RUSSELL	HQ	J JACKSON	NGT 00-090-212	5090
99	MASS INST OF TECH	D K RUSSELL	HQ	J JACKSON	NGT 00-090-213	5091
99	MASS INST OF TECH	D K RUSSELL	HQ	J JACKSON	NGT 00-090-231	5092
99	UNIV OF MASS-AMHERST	G ASRAR	HQ	A W PAYLOR	NGT 00-030-101	5126
99	DELTA COLLEGE	M PHELPS	HQ	H ARMAN	NAGW 3208	5157
99	EASTRN MICHIGAN UNIV	D GALLAWAY	HQ	J BARNES	NAGW 3073	5158
99	MICHIGAN STATE UNIV	D K RUSSELL	HQ	M KEMP	NGT 00-070-316	5176
99	UNIV MICH-ANN ARBOR	G ASRAR	HQ	L L GEZON	NGT 00-030-103	5325

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
99	UNIV MICH-ANN ARBOR	E T SCHWARTZ	HQ	J G ELSLEY	NGT 00-040-007	5329
99	UNIV MICH-ANN ARBOR	D K RUSSELL	HQ	S GREGERMAN	NGT 00-090-207	5348
99	MANKATO STATE UNIV	F SIX	MSFC	J HAKKILA	NAG 8-192	5366
99	U MINN-MNPLS-ST PAUL	G ASRAR	HQ	R J WEBER	NGT 00-030-111	5419
99	U MINN-MNPLS-ST PAUL	E T SCHWARTZ	HQ	P W WEIBLER	NGT 00-040-027	5421
99	UNIV OF MINN-DULUTH	R ROMERO	LERC	T B HOLST	NAG 3-1367	5433
99	JACKSON STATE UNIV	M MARGOLIS	HQ	R SULLIVAN	NGT 00-090-034	5436
99	MISSISSIPPI STATE U	C M HOSKINS	JSC	M D TRYMAN	NAG 9-624	5453
99	UNIV MISS-UNIVERSITY	E T SCHWARTZ	HQ	M R DINGERSON	NGT 00-040-028	5470
99	WASHINGTON UNIVERSITY	D DAVIS	KSC	R E MORLEY	NAG10-107	5546
99	WASHINGTON UNIVERSITY	E T SCHWARTZ	HQ	R E ARVIDSON	NGT 00-040-029	5549
99	MONTANA STATE UNIV	A S MCGEE	HQ	W A HISCOCK	NCCW 58	5566
99	MONTANA STATE UNIV	E T SCHWARTZ	HQ	W A HISCOCK	NGT 00-040-041	5567
99	UNIV NEB-OMAHA	L KEFFER	HQ	B B BOWEN	NGT 00-040-051	5605
99	UNIV NEVADA-L VEGAS	E T SCHWARTZ	HQ	J V TARANIK	NGT 00-040-042	5614
99	UNIV NEW HAMP-DURHAM	E T SCHWARTZ	HQ	D S BARHETT	NGT 00-040-030	5710
99	PRINCETON UNIVERSITY	D K RUSSELL	HQ	H MCCULLOCH	NGT 00-090-226	5784
99	STEVENS INST OF TECH	E T SCHWARTZ	HQ	D RICHMAN	NGT 00-040-032	5815
99	NM HIGHLANDS UNIV	B WHITE	HQ	H W TAYLOR	NGT 00-090-070	5822
99	NEW MEX ST U-LAS CR	E T SCHWARTZ	HQ	S HORAN	NGT 00-040-019	5860
99	NEW MEX ST U-LAS CR	D K RUSSELL	HQ	P HYNES	NGT 00-090-114	5865
99	NEW MEX ST U-LAS CR	D K RUSSELL	HQ	P HYNES	NGT 00-090-115	5866
99	NEW MEX ST U-LAS CR	D K RUSSELL	HQ	P HYNES	NGT 00-090-161	5867
99	UNIV OF NEW MEXICO	D K RUSSELL	HQ	M LEE	NGT 00-090-221	5893
99	CITY U OF NY CTY COL	F SIX	MSFC	G G GOSS	NAG 8-261	5901
99	CITY U OF NY CTY COL	B WHITE	HQ	C WATKINS	NGT 00-090-056	5909
99	COLUMBIA UNIVERSITY	R STACHNIK	HQ	C MARTIN	NAGW 2593	5974
99	COLUMBIA UNIVERSITY	G ASRAR	HQ	R G FAIRBANKS	NGT 00-030-162	5995
99	COLUMBIA UNIVERSITY	D K RUSSELL	HQ	K MCDERMOTT	NGT 00-090-229	6006
99	CORNELL UNIVERSITY	E T SCHWARTZ	HQ	P J GIERASCH	NGT 00-040-012	6098
99	CORNELL UNIVERSITY	D K RUSSELL	HQ	K PHILLIPS	NGT 00-090-228	6118
99	CORNELL UNIVERSITY	D K RUSSELL	HQ	W S GREEN	NGT 00-090-239	6119
99	CORNELL UNIVERSITY	D K RUSSELL	HQ	G KRASILOVSKY	NGT 00-090-151	6123
99	HUNTER COLLEGE	D K RUSSELL	HQ	C H STOLZE	NGT 00-090-233	6125
99	MANHATTAN COLLEGE	D K RUSSELL	HQ	H WEIDEMEIER	NAS 8-38143	6174
99	RENSSELAER POLY-NY	L P JETER	MSFC	H WEIDEMEIER	NAS 8-39723	6175
99	RENSSELAER POLY-NY	L JETER	MSFC	N BURNETT	NGT 00-090-131	6188
99	RENSSELAER POLY-NY	D K RUSSELL	HQ	N BURNETT	NGT 00-090-132	6189
99	RENSSELAER POLY-NY	D K RUSSELL	HQ	D TUTT	NGT 00-090-133	6190
99	RENSSELAER POLY-NY	D K RUSSELL	HQ	N BURNETT	NGT 00-090-134	6191
99	RENSSELAER POLY-NY	D K RUSSELL	HQ	N BURNETT	NGT 00-090-188	6192
99	RENSSELAER POLY-NY	D RUSSELL	HQ	N BURNETT	NGT 00-090-189	6193
99	RENSSELAER POLY-NY	D K RUSSELL	HQ	N BURNETT	NAGW 3206	6275
99	STATE U NY-STONY BRK	B WHITE	HQ	M ADAMS	NGT 00-090-166	6346
99	DUKE UNIVERSITY	D K RUSSELL	HQ	E H DOWELL	NGT 00-090-124	6355
99	FAYETTEVILLE STATE U	D K RUSSELL	HQ	L EDWARDS	NAG 8-223	6357
99	GUILFORD COLLEGE	F SIX	MSFC	C ALMY	NAG 1-956	6359
99	NO CAR A&T STATE U	S E MASSENBERG	LARC	L SHARPE	NAGW 2924	6368
99	NO CAR A&T STATE U	S E MASSENBERG	HQ	J C KELLY JR.	NAS 1-19157	6369
99	NO CAR A&T STATE U	S E MASSENBERG	LARC	L SHARPE	NGT 00-090-083	6371
99	NO CAR A&T STATE U	D K RUSSELL	HQ	L SHARPE	NGT 00-090-084	6372
99	NO CAR A&T STATE U	D K RUSSELL	HQ	L SHARPE	NGT 00-090-085	6373
99	NO CAR A&T STATE U	D K RUSSELL	HQ	L SHARPE	NGT 00-090-086	6374
99	NO CAR A&T STATE U	D K RUSSELL	HQ	L SHARPE	NGT 00-090-087	6375
99	NO CAR A&T STATE U	D K RUSSELL	HQ	L SHARPE	NGT 00-090-088	6376
99	NO CAR A&T STATE U	D K RUSSELL	HQ	L SHARPE	NGT 00-040-031	6420
99	NO CAROLINA STATE U	L KEFFER	HQ	G N WALBERG	NGT 00-090-126	6428
99	NO CAROLINA STATE U	D K RUSSELL	HQ	R TURNER	NGT 00-090-225	6429
99	NO CAROLINA STATE U	D K RUSSELL	HQ	V R JENKINS	NGT 00-090-135	6430
99	PEMBROKE STATE UNIV	D K RUSSELL	HQ	A LOCKLEAR	NGT 00-090-136	6431
99	PEMBROKE STATE UNIV	D K RUSSELL	HQ	A LOCKLEAR		

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
99	WINSTON-SALEM ST U	D RUSSELL	HQ	W ATKINSON	NGT 00-090-050	6454
99	TURTLE MT. COMM. COL	B WHITE	HQ	S KARNAWAT	NAGW 3620	6457
99	UNIV OF NORTH DAKOTA	E T SCHWARTZ	HQ	C A WOOD	NGT 00-040-043	6462
99	CASE WESTERN RESERVE	G C MADZSAR	LERC	C C LIU	NAG 3-1149	6483
99	CASE WESTERN RESERVE	K A VARIS	LERC	R M MASON	NAG 3-1495	6498
99	CASE WESTERN RESERVE	W A ORAN	HQ	J F WALLACE	NAGW 1193	6506
99	CASE WESTERN RESERVE	L JETER	MSFC	D MATTHIESEN	NAS 8-39695	6509
99	CASE WESTERN RESERVE	L JETER	MSFC	D MATTHIESEN	NAS 8-39722	6510
99	CASE WESTERN RESERVE	D RUSSELL	HQ	M BOULDING	NGT 00-090-177	6572
99	CLEVELAND STATE UNIV	J E BOYD	LERC	P C CHARITY	NAG 3-1511	6590
99	CUYAHOGA COMMUNITY C	D E LACY	LERC	S K BECKER	NAG 3-1509	6636
99	CUYAHOGA COMMUNITY C	J STORTO	LERC	J L JEFFERSON	NAG 3-1666	6637
99	CUYAHOGA COMMUNITY C	R L BONDURANT	LERC	S CHAND	NCC 3-323	6640
99	UNIV OF AKRON	R F LAWRENCE	LERC	B MCCLAIN	NAG 3-1189	6748
99	UNIV OF CINCINNATI	R F LAWRENCE	LERC	E N PRATHER	NAG 3-1188	6791
99	OKLAHOMA STATE UNIV	L B BILBROUGH	HQ	K WIGGINS	NASW 4516	6888
99	OKLAHOMA STATE UNIV	L BILBROUGH	HQ	K WIGGINS	NCCW 5	6890
99	UNIV OKLAHOMA-NORMAN	E T SCHWARTZ	HQ	K L HOVING	NGT 00-040-052	6906
99	OREGON STATE UNIV	E T SCHWARTZ	HQ	D R CALDWELL	NGT 00-040-033	6955
99	BRYN MAWR COLLEGE	D RUSSELL	HQ	V DONNAY	NGT 00-090-183	6973
99	CARNEGIE-MELLON UNIV	T GRAHAM	KSC	W L WHITTAKER	NAG10-95	6990
99	CARNEGIE-MELLON UNIV	D RUSSELL	HQ	R KAIL	NGT 00-090-184	7012
99	PENN STATE U-UNIV PK	I S SMITH	GSFC	I R HARRISON	NAG 5-643	7087
99	PENN STATE U-UNIV PK	W A ORAN	HQ	W HYMER	NAGW 1196	7127
99	PENN STATE U-UNIV PK	L T KEFFER	HQ	R DEVON	NGT 00-040-002	7179
99	PENN STATE U-UNIV PK	F C OWENS	HQ	K HEID	NGT 00-050-393	7180
99	PENN STATE U-UNIV PK	D K RUSSELL	HQ	D DAVIS	NGT 00-090-130	7202
99	UNIV OF PENNSYLVANIA	D K RUSSELL	HQ	C INGRUM	NGT 00-090-241	7216
99	UNIV OF PITTSBURGH	F E PENARANDA	HQ	L S HUMMEL	NASW 4677	7242
99	BROWN UNIVERSITY	E T SCHWARTZ	HQ	P H SCHULTZ	NGT 00-040-034	7295
99	CLEMSON UNIV-CLEMSON	D K RUSSELL	HQ	S J LASSER	NGT 00-090-109	7360
99	CLEMSON UNIV-CLEMSON	D K RUSSELL	HQ	S J LASSER	NGT 00-090-110	7361
99	CLEMSON UNIV-CLEMSON	D RUSSELL	HQ	S LASSER	NGT 00-090-192	7362
99	CLEMSON UNIV-CLEMSON	D K RUSSELL	HQ	S LASSER	NGT 00-090-193	7363
99	CLEMSON UNIV-CLEMSON	D RUSSELL	HQ	S LASSER	NGT 00-090-194	7364
99	CLEMSON UNIV-CLEMSON	D RUSSELL	HQ	S LASSER	NGT 00-090-220	7365
99	COLLEGE OF CHARLESTN	E T SCHWARTZ	HQ	M W COLGAN	NGT 00-040-055	7367
99	UNIV SO CAROLINA-COL	D K RUSSELL	HQ	M SUTTON	NGT 00-090-145	7375
99	SO DAKOTA SCHL MINES	G ASRAR	HQ	S A CHRISTOPHER	NGT 00-030-142	7388
99	SO DAKOTA SCHL MINES	E T SCHWARTZ	HQ	P L SMITH	NGT 00-040-046	7389
99	SO DAKOTA SCHL MINES	D K RUSSELL	HQ	F CAMPONE	NGT 00-090-139	7390
99	SO DAKOTA STATE UNIV	F SIX	MSFC	S SCHILLER	NAG 8-258	7391
99	TENNESSEE STATE UNIV	D K RUSSELL	HQ	S DEVGAN	NGT 00-090-127	7420
99	VANDERBILT UNIVERSTY	E T SCHWARTZ	HQ	H M STRAUSS	NGT 00-040-021	7480
99	RICE UNIVERSITY	D K RUSSELL	HQ	R STABELL	NGT 00-090-140	7579
99	RICE UNIVERSITY	D K RUSSELL	HQ	R STABELL	NGT 00-090-165	7580
99	RICE UNIVERSITY	D K RUSSELL	HQ	R STABELL	NGT 00-090-219	7581
99	TEXAS A&M UNIVERSITY	F E PEWARANDA	HQ	G SERA	NASW 4679	7659
99	TEXAS A&M UNIVERSITY	D K RUSSELL	HQ	W D TURNER	NGT 00-090-128	7682
99	TEXAS A&M UNIVERSITY	D K RUSSELL	HQ	W D TURNER	NGT 00-090-129	7683
99	TEXAS A&M UNIVERSITY	D RUSSELL	HQ	W D TURNER	NGT 00-090-168	7684
99	TEXAS A&M UNIVERSITY	D K RUSSELL	HQ	W D TURNER	NGT 00-090-169	7685
99	TEXAS A&M UNIVERSITY	D RUSSELL	HQ	W D TURNER	NGT 00-090-190	7686
99	TEXAS A&M UNIVERSITY	D K RUSSELL	HQ	W D TURNER	NGT 00-090-191	7687
99	TEXAS A&M UNIVERSITY	D K RUSSELL	HQ	W D TURNER	NGT 00-090-217	7688
99	TEXAS A&M UNIVERSITY	D K RUSSELL	HQ	W D TURNER	NGT 00-090-218	7689
99	TEXAS SOUTHERN UNIV	J ATKINSON JR.	JSC	L HYMAN	NAG 9-721	7701
99	TEXAS SOUTHMOST COLL	L ARMENDARIZ	JSC	L V LOF	NAGW 3060	7703
99	UNIV HOUSTON	G JOHNSON	JSC	J M BENNETT	NAG 9-658	7732
99	UNIV HOUSTON	D RUSSELL	HQ	G F PASKUSZ	NGT 00-090-176	7754

NASA'S UNIVERSITY PROGRAM

APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
99	UNIV HOUSTON	D K RUSSELL	HQ	G F PASKUSZ	NGT 00-090-245	7755
99	U TEX-PAN AM-EDNBURG	D K RUSSELL	HQ	W SHOCKLEY	NGT 00-090-101	7773
99	U TEX-PAN AM-EDNBURG	D K RUSSELL	HQ	W SHOCKLEY	NGT 00-090-102	7774
99	U TEX-PAN AM-EDNBURG	D K RUSSELL	HQ	W C SHOCKLEY	NGT 00-090-162	7775
99	U TEX-PAN AM-EDNBURG	D K RUSSELL	HQ	W C SHOCKLEY	NGT 00-090-163	7776
99	U TEX-PAN AM-EDNBURG	D K RUSSELL	HQ	W C SHOCKLEY	NGT 00-090-164	7777
99	UNIV HOUSTON-CL LAKE	D RUSSELL	JSC	G B FREEDMAN	NAG 9-569	7797
99	UNIV HOUSTON-CL LAKE	S H GOLDSTEIN	JSC	P BISHOP	NAG 9-660	7799
99	UNIV HOUSTON-CL LAKE	K E HENDERSON	JSC	R M JONES	NAG 9-731	7801
99	UNIV TEXAS-AUSTIN	N G ROBERTSON	HQ	B D TAPLEY	NAGW 1834	7866
99	UNIV TEXAS-AUSTIN	N B DOUGLAS	HQ	B D TAPLEY	NAS 3-26403	7898
99	UNIV TEXAS-AUSTIN	R J GUNDERMAN	LERC	W J VOGEL	NCC 2-787	7903
99	UNIV TEXAS-AUSTIN	G S LEE	ARC	G KOZMETSKY	NCC 9-22	7905
99	UNIV TEXAS-AUSTIN	W J HUFFSTETLER	JSC	G KOZMETSKY	NGT 00-040-003	7911
99	UNIV TEXAS-AUSTIN	E T SCHWARTZ	HQ	B D TAPLEY	NGT 00-090-097	7936
99	UNIV TEXAS-AUSTIN	D K RUSSELL	HQ	E ARMENDARIZ	NGT 00-090-216	7937
99	UNIV TEXAS-AUSTIN	D K RUSSELL	HQ	S KONRADI	NGT 00-090-044	7973
99	UNIV TEXAS-EL PASO	B WHITE	HQ	A LOPEZ	NGT 00-090-125	7974
99	UNIV TEXAS-EL PASO	D K RUSSELL	HQ	A LOPEZ	NGT 00-090-099	7983
99	UNIV TEXAS-S ANTONIO	D K RUSSELL	HQ	L R WILLIAMS	NGT 00-090-100	7984
99	UNIV TEXAS-S ANTONIO	D K RUSSELL	HQ	L R WILLIAMS	NAGW 3687	8006
99	UNIV OF UTAH	W C STAMPER	HQ	R PUGMIRE	NGT 00-030-257	8011
99	UNIV OF UTAH	M BALTUCK	HQ	D CHAPMAN	NGT 00-040-014	8041
99	UTAH STATE UNIV	E T SCHWARTZ	HQ	F J REDD	NGT 00-040-054	8050
99	U VERMONT & ST AGR C	L KEFFER	HQ	W D LAKIN	NGT 00-090-156	8059
99	CHRISTPHR NEWPORT U	R LANG	LARC	F HARTLINE	NAS 1-18347	8072
99	COLLEGE OF WM & MARY	E J PRIOR	LARC	D E KRANBUEHL	NCC 1-150	8078
99	COLLEGE OF WM & MARY	T L ST. CLAIR	LARC	R A ORWOLL	NAG 1-1185	8113
99	HAMPTON UNIVERSITY	S E MASSENBERG	LARC	P F MOLIN	NAS 1-19935	8117
99	HAMPTON UNIVERSITY	R L YANG;	LARC	N	NAG 8-257	8128
99	NORFOLK STATE UNIV	F SIX	MSFC	L MATTIX	NGT 00-040-009	8181
99	OLD DOMINION UNIV	E T SCHWARTZ	HQ	M L SANDY	NGT 00-090-143	8201
99	OLD DOMINION UNIV	D K RUSSELL	HQ	E J CROSS	NGT 00-090-144	8202
99	OLD DOMINION UNIV	D K RUSSELL	HQ	E J CROSS	NGT 00-023-000	8205
99	THOS NELSON COMM COL	R YANG	LARC	S FINCKE	NGT 00-090-214	8308
99	UNIV OF VIRGINIA	D K RUSSELL	HQ	R JENNINGS	NGT 00-090-232	8309
99	UNIV OF VIRGINIA	D K RUSSELL	HQ	R JENNINGS	NAS 1-19610	8370
99	VIRGINIA POLY INST	E J PRIOR	LARC		NGT 00-070-360	8396
99	VIRGINIA POLY INST	D K RUSSELL	HQ	R BURDISO	NGT 00-090-104	8399
99	VIRGINIA POLY INST	D K RUSSELL	HQ	J NOTTINGHAM	NGT 00-090-105	8400
99	VIRGINIA POLY INST	D K RUSSELL	HQ	J NOTTINGHAM	NGT 00-090-106	8401
99	VIRGINIA POLY INST	D K RUSSELL	HQ	J NOTTINGHAM	NGT 00-090-203	8402
99	VIRGINIA POLY INST	D RUSSELL	HQ	J NOTTINGHAM	NGT 00-090-204	8403
99	VIRGINIA POLY INST	D RUSSELL	HQ	J NOTTINGHAM	NGT 00-090-205	8404
99	VIRGINIA POLY INST	D RUSSELL	HQ	J NOTTINGHAM	NGT 00-090-206	8405
99	VIRGINIA POLY INST	D RUSSELL	HQ	J NOTTINGHAM	NGT 00-090-215	8406
99	VIRGINIA POLY INST	D K RUSSELL	HQ	J NOTTINGHAM	NGT 00-090-174	8411
99	VIRGINIA COMNWLTH U	D RUSSELL	HQ	J BERLUND	NAG 2-723	8431
99	UNIV OF WASHINGTON	H MIURA	ARC	E LIVNE	NGT 00-030-100	8538
99	UNIV OF WASHINGTON	G ASRAR	HQ	S E YUTER	NGT 00-030-110	8539
99	UNIV OF WASHINGTON	G ASRAR	HQ	D L WORTHEN	NGT 00-030-123	8541
99	UNIV OF WASHINGTON	G ASRAR	HQ	W T WELCH	NGT 00-040-011	8544
99	UNIV OF WASHINGTON	E T SCHWARTZ	HQ	G K PARKS	NAG 8-255	8579
99	FAIRMONT STATE COLL.	F SIX	MSFC	M S CANLON	NGT 00-040-047	8593
99	WEST VIRGINIA UNIV	E T SCHWARTZ	HQ	J T JUVEWICZ	NGT 00-051-370	8600
99	WEST VIRGINIA UNIV	L EVANS	LARC	J G WELLS	NAGW 2486	8603
99	WHEELING JESUIT COL	F DURSO	HQ	T ACKER	NAGW 3110	8604
99	WHEELING JESUIT COL	F X DURSO	HQ	T S ACKER	NCC 5-107	8605
99	WHEELING JESUIT COL	A F HASLER	GSFC	R MYERS	NCCW 12	8606
99	WHEELING JESUIT COL	M V PHELPS	HQ	C D MILLER	NCCW 14	8607
99	WHEELING JESUIT COL	J ROOT	HQ	L W RIVERS		

NASA'S UNIVERSITY PROGRAM **APPENDIX - CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING**

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	ACC NO.
99	MARQUETTE UNIVERSITY	F SIX	MSFC	J RICHIE	NAG 8-256	8613
99	UNIV WISC-MILWAUKEE	E T SCHWARTZ	HQ	G T MOORE	NGT 00-040-035	8764
99	UNIV OF WYOMING	E T SCHWARTZ	HQ	P E JOHNSON	NGT 00-040-050	8782
99	U PUERTO RICO-MAYAGZ	A S MCGEE	HQ	J G LAGOA	NCCW 56	8794
99	U PUERTO RICO-MAYAGZ	E T SCHWARTZ	HQ	J G GONZALES	NGT 00-040-053	8796
99	U OF TURABO-PRTO RCO	R YANG	LARC	U C DAWES	NGT 00-090-157	8816
99	UNIV OF CHILE	W J BODIN	GSFC	E DIAZ	NAS 5-1925	8823

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